

**Town of Sterling Other
Postemployment Benefits Plan**

GASB 74/75 Actuarial Valuation

With a Valuation Date of June 30, 2017

& a Measurement Date of June 30, 2017

For the Reporting Dates of

June 30, 2018

June 30, 2019

Delivered January 2018

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January 10, 2018

Personal and Confidential

Ms. Victoria Smith
Treasurer / Collector
Town of Sterling
1 Park Street
Sterling, MA 01564

Dear Ms. Smith:

We have performed an actuarial valuation of the Town of Sterling Other Postemployment Benefits Plan for the Reporting Date & fiscal year ending June 30, 2018 with a Measurement Date of June 30, 2017 and a Valuation Date of June 30, 2017. The figures presented in this report reflect the adoption, by the Town of Sterling, of Statement Nos. 74 and 75 of the Governmental Accounting Standards Board ("GASB 74/75") effective for the fiscal year ending June 30, 2017 and June 30, 2018 respectively.

The financial results of the actuarial valuation are summarized in the report. The Executive Summaries highlight the results of the valuation. Additional information summarizing census data, actuarial assumptions, claim rates and the methodology for developing them, as well as a glossary of selected terms used in this study, is also included in the report.

All costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures. In our opinion, the actuarial assumptions used are reasonable, reflecting the experience of the plan and reasonable expectations and, in combination, represent our best estimate of the anticipated experience under the plan.

We refer you to Section I of this report for a detailed summary and commentary on the results of the valuation and a comparison with the prior valuation. Section II is a summary of the plan provisions, and Section III describes the actuarial cost method and assumptions. Details for cost calculations, supporting data, and disclosures are provided in Exhibits A through C.

We will be pleased to answer any questions that you may have regarding this actuarial valuation report.

Very truly yours,



Parker E. Elmore, ASA, EA, FCA, MAAA
President, CEO & Actuary

January 10, 2018**ACTUARIAL CERTIFICATION**

This is to certify that Odyssey Advisors has conducted an actuarial valuation of certain benefit obligations of the Town of Sterling other postemployment benefit programs with a Valuation Date of June 30, 2017 with a Measurement Date of June 30, 2017 for the Reporting Date & fiscal year ending June 30, 2018 in accordance with generally accepted actuarial principles and practices. The actuarial calculations presented in this report have been made on a basis consistent with our understanding of GASB Statements Numbers 74 & 75 for the determination of the liability for postemployment benefits other than pensions.

The actuarial data is based on the plan of benefits verified by the Town and on participant claims or premium data provided by the Town and/or vendors employed by the Town.

The actuarial computations made are for purposes of fulfilling plan accounting requirements. Determinations for purposes other than meeting financial accounting requirements may yield results significantly different than those reported here. As such, additional determinations may be needed for other purposes including determining the benefit security at termination and/or adequacy of the funding of an ongoing plan.

To the best of our knowledge, this report is complete and accurate and in our opinion represents the information necessary to comply with GASB Statements Number 74 and 75 with respect to the benefit obligations addressed. The signing actuaries are members of the Society of Actuaries, the American Academy of Actuaries and other professional actuarial organizations and meet their "General Qualification Standards for Statements of Actuarial Opinion" to render the actuarial opinion contained herein. Further, in our opinion, the assumptions as approved by the Town are reasonably related to the experience and expectations of the postemployment benefits programs.



Parker E. Elmore, ASA, EA, FCA, MAAA
President, CEO & Actuary

Executive Summary

GASB 74 and 75 Impact

The Town adopted GASB 74 for the fiscal year ending June 30, 2017 and GASB 75 for the fiscal year ending June 30, 2018. The adoption of GASB 74/75 introduces a new actuarial cost method and discount rate as well as new disclosures and methodologies for reporting plan liabilities and OPEB expenses. Significant changes have been made to the recognition of OPEB expenses, which makes the comparison of Net OPEB Expense in the current valuation to the expenses reported under GASB 45 misleading. The liability reported on the Town's balance sheet is likely to increase dramatically as GASB 74/75 require the recognition of liabilities immediately rather than over a 30 year period as GASB 45 allowed.

What caused plan liabilities to change from FY 16 to FY 18?

Plan experience was in line with expectation - for the year ending on the Measurement Date of June 30, 2017, the Plan saw an experience loss of \$130,606 or 1.50%. The experience loss was mostly due to an increase in the number of covered retirees and spouses. This was somewhat offset by premiums for non-Medicare integrated plans increasing by less than expected and a reduction in average service. The actuarial experience loss is amortized into the net OPEB expense over time until fully recognized. Changes in assumptions decreased disclosed liabilities by \$2.81 million.

Over the two year period, the Total OPEB Liability ("TOL") went from \$11,170,162 as of June 30, 2015 to \$9,429,428 as of June 30, 2017 for a decrease of \$1,740,734. The Net OPEB Expense was \$284,385 for the fiscal year June 30, 2018. As this is the first year using GASB 75 methodology, there is no baseline for comparison. For a projection of future costs and liabilities refer to Exhibit D.

Executive Summary

(continued)

Assumption changes

A key assumption has changed since the prior valuation - the impact is detailed below.

- ✓ Due to the GASB 75 standards the discount rate was changed from 3.50% to 5.50% decreasing the disclosed liability by \$2.81 million.
- ✓ Assumption changes caused Normal Cost to decrease by \$170 thousand.

It is important to remember that actuarial assumptions or changes in such do not impact the actual cost of the Plan. Rather, they impact the timing of the recognition of such costs.

Key Drivers of Plan Liabilities

Several key drivers of plan costs and liabilities are:

- ✓ Premiums for Post 65 (Medicare Integrated) plans - represent 67% of the total plan liabilities
- ✓ Age at which plan participants retire
- ✓ Percentage of plan participants who elect coverage for themselves and/or a spouse
- ✓ Medical care cost inflation rate
- ✓ Discount Rate
- ✓ Cost Sharing - Under Massachusetts law you may charge retirees up to 50% of premiums for health insurance.

Executive Summary
(continued)

What is Implicit Subsidy? How does it impact us?

The implicit subsidy arises because retirees who are not eligible for Medicare are charged the same premium as active employees, even though their actual medical costs are higher on average. Consequently, a portion of the premiums being paid for active employees are being used to “subsidize” the premiums of retirees. Actuarial Standards of Practice and GASB standards require the liability associated with this implicit subsidy to be valued. The chart below shows a breakdown of how implicit cost impacts reported cash flows and liabilities.

Impact of Implicit Subsidy		
	As Of The Measurement Date	
Impact on Liability	<u>June 30, 2017</u>	<u>June 30, 2015</u>
I. Actuarial Accrued Liability	9,429,428	11,170,162
II. Actuarial Accrued Liability (Excluding Implicit Subsidy)	<u>9,081,865</u>	<u>N/A</u>
III. Liability from Implicit Subsidy [I. - II.]	347,563	N/A

	For The Fiscal Year Ending	
Impact on Payments	<u>June 30, 2018</u>	<u>June 30, 2016</u>
IV. Employer Payments (Including Implicit Subsidy)	380,287	301,184
V. Actual Employer Payments	<u>350,431</u>	<u>N/A</u>
VI. Implicit Subsidy [IV. - V.]	29,856	N/A

Executive Summary (continued)

What are some key plan metrics?

While an actuarial valuation under GASB 74/75 can be very complex with many variables, we find it helpful to look at several key metrics shown below to better allow you to manage your plan.

Representative Plan Statistics

	<u>June 30, 2017</u>	<u>June 30, 2015</u>
Total OPEB Liability	9,429,428	11,170,162
Per Eligible Active Plan Participant	88,830	117,262
Per Retiree/Spouse Plan Participant	62,253	93,949
Total Annual Service Cost (annual benefit accrual)	279,591	458,868
Per Eligible Active Plan Participant	4,510	8,194
Expected Employer Share of Retiree Costs	380,287	301,184
Per Retiree/Spouse Plan Participant	6,036	6,147
Net OPEB Liability as a % of Payroll	236.50%	324.70%
Average Annual Medical Plan Premium (Single Coverage)	6,888	6,413
Average Annual Medical Plan Premium (Family Coverage)	28,822	27,447
<u>Projected 2020 Excise Tax Thresholds</u>		
Annual Medical Plan Premium (Single Coverage)	11,850	
Annual Medical Plan Premium (Family Coverage)	30,950	

Executive Summary (continued)

Liabilities & Benefit Payments in today's dollars

With the growth of medical care costs over time, the nominal accrued liabilities ("TOL") and benefit payments can appear daunting. However, it is important to remember that a dollar paid in the future is worth less than a dollar paid today.

Measurement Date	Number of Retirees, Spouses & Surviving Spouses	Present Value at 3.00% of Total OPEB Liability	Present Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"
June 30, 2017	63	9,429,428	380,287
June 30, 2022	71	10,097,903	434,466
June 30, 2027	73	10,679,093	465,551
June 30, 2032	74	11,266,927	517,922
June 30, 2037	74	11,791,305	567,835
June 30, 2042	74	12,295,802	590,901
June 30, 2047	74	12,963,135	637,676

A full projection of plan costs and liabilities in today's dollars is shown in Exhibit E of this report.

We have an "unfunded liability". How do we fund it? Can we fund it?

If you're looking to fund your OPEB liability, there are a variety of manner to do so. The amount of funding in combination with your Investment Policy will impact the discount rate and disclosed liabilities. Below are a few sample funding options, but it's important to develop a funding policy that fits your organization as each situation is different.

	Partial Funding	Full Funding Level Dollar	Full Funding increasing at 3.00% per year
Net OPEB Liability	\$9,282,591	\$7,640,013	\$7,640,013
Required Trust Contribution	\$150,000	\$262,600	\$197,800
Discount Rate	5.50%	7.00%	7.00%

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

Town of Sterling Assuming Partial Funding - 5.50% discount rate Comparison of Plan Liabilities to Prior Valuation

		As of the Measurement Date	
		<u>June 30, 2017</u>	<u>June 30, 2015</u>
I.	Present Value of Future Benefits		
A.	Actives	8,080,660	12,182,171
B.	Retirees/Disabled	<u>3,921,961</u>	<u>4,603,490</u>
C.	Total	12,002,621	16,785,661
II.	Present Value of Future Normal Cost	2,573,193	5,615,499
III.	Total OPEB Liability (Individual Entry Age Normal)		
A.	Actives	5,507,467	6,566,672
B.	Retirees/Disabled	<u>3,921,961</u>	<u>4,603,490</u>
C.	Total	9,429,428	11,170,162
IV.	Fiduciary Net Position	146,837	26,144
V.	Net OPEB Liability (Asset) [III. - IV.]	9,282,591	11,144,018
VI.	Funded Ratio [IV. / III.]	1.56%	0.23%
VII.	Annual Covered Payroll	3,925,073	3,432,144
VIII.	Net OPEB Liability (Asset) as % of Covered Payroll	236.5%	324.7%
IX.	Number of Eligible Participants		
A.	Actives	62	56
B.	Retirees/Disabled	<u>63</u>	<u>49</u>
C.	Total	125	105
For the Reporting Date and Fiscal Year Ending June 30, 2018		<u>June 30, 2018</u>	<u>June 30, 2016</u>
X.	Service Cost	279,591	458,868
XI.	Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	515,603	N/A
XII.	Deferred (Inflows)/Outflows from Plan Design Changes	0	N/A
XIII.	Deferred (Inflows)/Outflows from Expected & Actual Experience	27,680	N/A
XIV.	Deferred (Inflows)/Outflows from Changes in Assumptions	0	N/A
XV.	Projected Earning on OPEB plan investments	(7,473)	N/A
XVI.	Deferred (Inflows)/Outflows from Earnings on Investments	(729)	N/A
XVII.	Employer Share of Costs	(380,287)	(301,184)
XVIII.	Employer (Payments)/Withdrawals to/from OPEB Trust	(150,000)	0
XIX.	Total Employer Contribution [XVII. + XVIII.]	(530,287)	(301,184)
XX.	Other Changes	0	N/A
XXI.	Net OPEB Expense [X.+XI.+XII.+XIII.+XIV.+XVI.+XIX.+XX.]	284,385	N/A
XXII.	Discount Rate	5.50%	3.50%

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Sterling
Comparison of Plan Funding vs. Partial Funding

As of the June 30, 2017 Measurement Date

	<u>Partial Funding - 5.50%</u> <u>discount rate</u>	<u>Funding - 7.00%</u> <u>discount rate</u>
I. Present Value of Future Benefits		
A. Actives	8,080,660	5,877,993
B. Retirees/Disabled	3,921,961	3,495,590
C. Total	12,002,621	9,373,583
II. Present Value of Future Normal Cost	2,573,193	1,586,733
III. Total OPEB Liability (Individual Entry Age Normal)		
A. Actives	5,507,467	4,291,260
B. Retirees/Disabled	3,921,961	3,495,590
C. Total	9,429,428	7,786,850
IV. Fiduciary Net Position	146,837	146,837
V. Net OPEB Liability (Asset) [III. - IV.]	9,282,591	7,640,013
VI. Funded Ratio [IV. / III.]	1.56%	1.89%
VII. Annual Covered Payroll	3,925,073	3,925,073
VIII. Net OPEB Liability (Asset) as % of Covered Payroll	236.5%	194.6%
IX. Number of Eligible Participants		
A. Actives	62	62
B. Retirees/Disabled	63	63
C. Total	125	125
For the Reporting Date and Fiscal Year Ending June 30, 2018		
X. Service Cost	279,591	196,061
XI. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	515,603	535,441
XII. Deferred (Inflows)/Outflows from Plan Design Changes	0	0
XIII. Deferred (Inflows)/Outflows from Expected & Actual Experience	27,680	27,680
XIV. Deferred (Inflows)/Outflows from Changes in Assumptions	0	(338,676)
XV. Projected Earning on OPEB plan investments	(7,473)	0
XVI. Deferred (Inflows)/Outflows from Earnings on Investments	(729)	(729)
XVII. Employer Share of Costs	(380,287)	(380,289)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(150,000)	(262,600)
XIX. Total Employer Contribution [XVII. + XVIII.]	(530,287)	(642,889)
XX. Other Changes	0	0
XXI. Net OPEB Expense [X.+XI.+XII.+XIII.+XIV.+XV.+XVI.+XIX.+XX.]	284,385	(223,112)

SECTION I
PRINCIPAL RESULTS OF THE VALUATION
(continued)

Town of Sterling
Assuming Partial Funding - 5.50% discount rate
Plan Liabilities as of the June 30, 2017 Measurement Date

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	7,130,818	723,051	27,027	199,764	8,080,660
B. Retirees/Disabled	<u>3,465,562</u>	<u>392,490</u>	<u>55,519</u>	<u>8,390</u>	<u>3,921,961</u>
C. Total	10,596,380	1,115,541	82,546	208,154	12,002,621
II. Present Value of Future Normal Cost	2,252,443	231,871	6,199	82,680	2,573,193
III. Total OPEB Liability					
A. Actives	4,878,375	491,180	20,828	117,084	5,507,467
B. Retirees/Disabled	<u>3,465,562</u>	<u>392,490</u>	<u>55,519</u>	<u>8,390</u>	<u>3,921,961</u>
C. Total	8,343,937	883,670	76,347	125,474	9,429,428
IV. Fiduciary Net Position	129,933	13,761	1,189	1,954	146,837
V. Net OPEB Liability (Asset) [III. - IV.]	8,214,004	869,909	75,158	123,520	9,282,591
VI. Annual Covered Payroll	3,925,073	3,925,073	3,925,073	3,925,073	3,925,073
VII. Net OPEB Liability (Asset) as % of Covered Payroll	209.3%	22.2%	1.9%	3.1%	236.5%
VIII. Number of Eligible Participants					
IX. A. Actives	62	62	62	62	
B. Retirees/Disabled	<u>63</u>	<u>40</u>	<u>26</u>	<u>63</u>	
C. Total	125	102	88	125	
For the Reporting Date and Fiscal Year Ending June 30, 2018					
X. Service Cost	246,334	25,759	926	6,572	279,591
XI. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	455,937	48,482	4,029	7,155	515,603
XII. Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0
XIII. Deferred (Inflows)/Outflows from Expected & Actual Experience	24,494	2,594	224	368	27,680
XIV. Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0
XV. Projected Earning on OPEB plan investments	(6,612)	(700)	(61)	(100)	(7,473)
XVI. Deferred (Inflows)/Outflows from Earnings on Investments	(646)	(69)	(5)	(9)	(729)
XVII. Employer Share of Costs	(345,773)	(28,706)	(5,808)	0	(380,287)
XVIII. Employer (Payments)/Withdrawals to/from OPEB Trust	(136,505)	(10,974)	(1,054)	(1,467)	(150,000)
XIX. Total Employer Contribution [XVII. + XVIII.]	(482,278)	(39,680)	(6,862)	(1,467)	(530,287)
XX. Other Changes	0	0	0	0	0
XXI. Net OPEB Expense [X.+XI.+XII.+XIII.+XIV.+XV.+XVI.+XIX.+XX.]	237,229	36,386	(1,749)	12,519	284,385

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Sterling

Plan Liabilities as of the June 30, 2017 Measurement Date

Assuming Partial Funding

	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	DPW Employees and Retirees	Water Enterprise Fund Employees and Retirees	Total
I. Present Value of Future Benefits						
A. Actives	1,580,281	3,391,130	1,249,258	1,460,627	399,364	8,080,660
B. Retirees/Disabled	<u>3,880,980</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>40,981</u>	<u>3,921,961</u>
C. Total	5,461,261	3,391,130	1,249,258	1,460,627	440,345	12,002,621
II. Present Value of Future Normal Cost	539,173	997,605	450,487	447,336	138,592	2,573,193
III. Total OPEB Liability						
A. Actives	1,041,108	2,393,525	798,771	1,013,291	260,772	5,507,467
B. Retirees/Disabled	<u>3,880,980</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>40,981</u>	<u>3,921,961</u>
C. Total	4,922,088	2,393,525	798,771	1,013,291	301,753	9,429,428
IV. Fiduciary Net Position	76,329	37,461	12,548	15,812	4,687	146,837
V. Net OPEB Liability (Asset) [III. - IV.]	4,845,759	2,356,064	786,223	997,479	297,066	9,282,591
VI. Annual Covered Payroll	919,817	1,587,434	585,923	608,829	223,070	3,925,073
VII. Net OPEB Liability (Asset) as % of Covered Payroll	526.8%	148.4%	134.2%	163.8%	133.2%	236.5%
VIII. Number of Eligible Participants						
A. Actives	21	18	7	12	4	62
B. Retirees/Disabled	<u>61</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>63</u>
C. Total	82	18	7	12	6	125

For the Reporting Date and Fiscal Year Ending June 30, 2018

IX. Service Cost	72,564	88,055	51,538	47,970	19,464	279,591
X. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	240,308	145,000	49,670	61,992	18,633	515,603
XI. Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0	0
XII. Deferred (Inflows)/Outflows from Expected & Actual Experience	14,448	7,027	2,344	2,975	886	27,680
XIII. Deferred (Inflows)/Outflows from Changes in Assumptions	0	0	0	0	0	0
XIV. Projected Earning on OPEB plan investments	(3,884)	(1,906)	(639)	(805)	(239)	(7,473)
XV. Deferred (Inflows)/Outflows from Earnings on Investments	(380)	(186)	(62)	(78)	(23)	(729)
XVI. Employer Share of Costs	(351,803)	(11,909)	(4,700)	(5,813)	(6,062)	(380,287)
XVII. Employer (Payments)/Withdrawals to/from OPEB Trust	(74,723)	(39,673)	(13,584)	(16,955)	(5,065)	(150,000)
XVIII. Total Employer Contribution [XVI. + XVII.]	(426,526)	(51,582)	(18,284)	(22,768)	(11,127)	(530,287)
XIX. Other Changes	0	0	0	0	0	0
XX. Net OPEB Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.+XVIII.+XIX.]	(103,470)	186,408	84,567	89,286	27,594	284,385

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Sterling

Detail of Plan Liabilities by Group and Dependency Status

Assuming Partial Funding - 5.50% discount rate

Plan Liabilities as of the June 30, 2017 Measurement Date

	<u>Present Value of Future Benefits</u>	<u>Total OPEB Liability (Individual Entry Age Normal)</u>	<u>Service Cost</u>
Actives			
Under Age 65			
A. Participants	2,088,053	1,272,388	60,887
B. Spouses	<u>1,820,490</u>	<u>1,140,914</u>	<u>52,641</u>
C. Total	3,908,543	2,413,302	113,528
Age 65 and Over			
A. Participants	2,037,331	1,756,884	94,778
B. Spouses	<u>2,134,786</u>	<u>1,337,281</u>	<u>71,285</u>
C. Total	4,172,117	3,094,165	166,063
Actives Total			
A. Participants	4,125,384	3,029,272	155,665
B. Spouses	<u>3,955,276</u>	<u>2,478,195</u>	<u>123,926</u>
C. Total	8,080,660	5,507,467	279,591
Retirees/Disabled			
Under Age 65			
A. Participants	342,496	342,496	0
B. Spouses	<u>375,216</u>	<u>375,216</u>	<u>0</u>
C. Total	717,712	717,712	0
Age 65 and Over			
A. Participants	2,424,332	2,424,332	0
B. Spouses	<u>779,917</u>	<u>779,917</u>	<u>0</u>
C. Total	3,204,249	3,204,249	0
Retirees/Disabled Total			
A. Participants	2,766,828	2,766,828	0
B. Spouses	<u>1,155,133</u>	<u>1,155,133</u>	<u>0</u>
C. Total	3,921,961	3,921,961	0
Total Population			
A. Participants	6,892,212	5,796,100	155,665
B. Spouses	<u>5,110,409</u>	<u>3,633,328</u>	<u>123,926</u>
C. Total	12,002,621	9,429,428	279,591

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Sterling

**Assuming Funding over 30 years at 7.00% discount rate
Plan Liabilities as of the June 30, 2017 Measurement Date**

	<u>Medical</u>	<u>Dental</u>	<u>Life</u>	<u>Excise Tax</u>	<u>Total</u>
I. Present Value of Future Benefits					
A. Actives	5,222,438	490,832	18,932	145,791	5,877,993
B. Retirees/Disabled	<u>3,092,389</u>	<u>344,923</u>	<u>50,848</u>	<u>7,430</u>	<u>3,495,590</u>
C. Total	8,314,827	835,755	69,780	153,221	9,373,583
II. Present Value of Future Normal Cost	1,400,981	131,367	3,677	50,708	1,586,733
III. Total OPEB Liability (Individual Entry Age Normal)					
A. Actives	3,821,457	359,465	15,255	95,083	4,291,260
B. Retirees/Disabled	<u>3,092,389</u>	<u>344,923</u>	<u>50,848</u>	<u>7,430</u>	<u>3,495,590</u>
C. Total	6,913,846	704,388	66,103	102,513	7,786,850
IV. Fiduciary Net Position	130,374	13,283	1,247	1,933	146,837
V. Net OPEB Liability (Asset) [III. - IV.]	6,783,472	691,105	64,856	100,580	7,640,013
VI. Annual Covered Payroll	3,925,073	3,925,073	3,925,073	3,925,073	3,925,073
VII. Net OPEB Liability (Asset) as % of Covered Payroll	172.8%	17.6%	1.7%	2.6%	194.6%
VIII. Number of Eligible Participants					
A. Actives	62	62	62	62	
B. Retirees/Disabled	<u>63</u>	<u>40</u>	<u>26</u>	<u>63</u>	
C. Total	125	102	88	125	

For the Reporting Date and Fiscal Year Ending June 30, 2018

IX. Service Cost	173,566	17,099	613	4,783	196,061
X. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	475,096	48,586	4,383	7,376	535,441
XI. Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0
XII. Deferred (Inflows)/Outflows from Expected & Actual Experience	24,577	2,504	235	364	27,680
XIII. Deferred (Inflows)/Outflows from Changes in Assumptions	(300,706)	(30,636)	(2,875)	(4,459)	(338,676)
XIV. Projected Earning on OPEB plan investments	0	0	0	0	0
XV. Deferred (Inflows)/Outflows from Earnings on Investments	(647)	(66)	(6)	(10)	(729)
XVI. Employer Share of Costs	(345,773)	(28,707)	(5,809)	0	(380,289)
XVII. Employer (Payments)/Withdrawals to/from OPEB Trust	(233,159)	(23,754)	(2,229)	(3,457)	(262,600)
XVIII. Total Employer Contribution [XVI. + XVII.]	(578,932)	(52,461)	(8,038)	(3,457)	(642,889)
XIX. Other Changes	0	0	0	0	0
XX. Net OPEB Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.+XVIII.+XIX.]	(207,047)	(14,975)	(5,688)	4,598	(223,112)

SECTION I

PRINCIPAL RESULTS OF THE VALUATION

(continued)

Town of Sterling
Plan Liabilities as of the June 30, 2017 Measurement Date
Assuming Funding over 30 years at 7.00% discount rate

	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	DPW Employees and Retirees	Water Enterprise Fund Employees and Retirees	Total
I. Present Value of Future Benefits						
A. Actives	1,149,520	2,466,759	908,729	1,062,482	290,503	5,877,993
B. Retirees/Disabled	<u>3,459,064</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>36,526</u>	<u>3,495,590</u>
C. Total	4,608,584	2,466,759	908,729	1,062,482	327,029	9,373,583
II. Present Value of Future Normal Cost	332,476	615,163	277,788	275,845	85,461	1,586,733
III. Total OPEB Liability						
A. Actives	811,202	1,864,966	622,379	789,527	203,186	4,291,260
B. Retirees/Disabled	<u>3,459,064</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>36,526</u>	<u>3,495,590</u>
C. Total	4,270,266	1,864,966	622,379	789,527	239,712	7,786,850
IV. Fiduciary Net Position	76,329	37,461	12,548	15,812	4,687	146,837
V. Net OPEB Liability (Asset) [III. - IV.]	4,193,937	1,827,505	609,831	773,715	235,025	7,640,013
VI. Annual Covered Payroll	919,817	1,587,434	585,923	608,829	223,070	3,925,073
VII. Net OPEB Liability (Asset) as % of Covered Payroll	456.0%	115.1%	104.1%	127.1%	105.4%	194.6%
VIII. Number of Eligible Participants						
A. Actives	21	18	7	12	4	62
B. Retirees/Disabled	<u>61</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>2</u>	<u>63</u>
C. Total	82	18	7	12	6	125
For the Reporting Date and Fiscal Year Ending June 30, 2018						
IX. Service Cost	50,884	61,748	36,141	33,639	13,649	196,061
X. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	285,035	131,837	45,056	56,315	17,198	535,441
XI. Deferred (Inflows)/Outflows from Plan Design Changes	0	0	0	0	0	0
XII. Deferred (Inflows)/Outflows from Expected & Actual Experience	14,448	7,027	2,344	2,975	886	27,680
XIII. Deferred (Inflows)/Outflows from Changes in Assumptions	(185,728)	(81,114)	(27,069)	(34,339)	(10,426)	(338,676)
XIV. Projected Earning on OPEB plan investments	0	0	0	0	0	0
XV. Deferred (Inflows)/Outflows from Earnings on Investments	(380)	(186)	(62)	(78)	(23)	(729)
XVI. Employer Share of Costs	(351,805)	(11,909)	(4,700)	(5,813)	(6,062)	(380,289)
XVII. Employer (Payments)/Withdrawals to/from OPEB Trust	(144,008)	(62,893)	(20,989)	(26,626)	(8,084)	(262,600)
XVIII. Total Employer Contribution [XVI. + XVII.]	(495,813)	(74,802)	(25,689)	(32,439)	(14,146)	(642,889)
XIX. Other Changes	0	0	0	0	0	0
XX. Net OPEB Expense [IX.+X.+XI.+XII.+XIII.+XIV.+XV.+XVIII.+XIX.]	(331,554)	44,510	30,721	26,073	7,138	(223,112)

Overview of GASB 74 and 75

Before Statements 74 and 75, GASB statement 45 established the reporting standards for Other Postemployment Benefit (“OPEB”) plans. It was designed to recognize the Other Postemployment Benefits earned by employees throughout their working career vs. when they are paid in retirement – accrual accounting vs. “pay-as-you-go” accounting. Additionally, each eligible active employee earns benefits each year representing benefits to be paid in retirement or a “Service Cost”. These amounts are reflected in your financial statement each year so that OPEB benefits for an eligible employee shall be fully charged to the financial statement when that eligible employee terminates employment.

In 2012 GASB issued GASB Statements 67 and 68 to update and standardize the financial reporting of pension liabilities. This increased the transparency of pension liabilities by moving them to the balance sheet and made financial statement disclosures of pension liabilities more comparable between municipal entities. GASB Statements 74 and 75 are designed to have the same effect on OPEB plans.

GASB 74 and 75 require retiree medical plans to disclose information about asset and liability levels and show historical contribution information. GASB 74 only applies in situations where a separate trust is established to prefund these benefits. GASB 75 requires employers to perform periodic actuarial valuations to determine annual accounting costs and to keep a running tally of the extent to which these amounts are over or under funded.

GASB 74 and 75 apply to those benefits provided after retirement, except for pension benefits, such as medical, dental and life insurance. The philosophy behind the accounting standard is that these post-employment benefits are part of the compensation earned by employees in return for their services, and the cost of these benefits should be recognized while employees are providing those services, rather than after they have retired. This philosophy has already been applied for years to defined benefit pensions; GASB 74 and 75 extend this practice to all other post-employment benefits.

Overview of GASB 74 and 75

(continued)

The process of determining the liability for OPEB benefits is based on many assumptions about future events. The key actuarial assumptions are:

Turnover and retirement rates: How likely is it that an employee will qualify for post-employment benefits and when will they start?

Medical inflation and claims cost assumptions: When an employee starts receiving post-employment benefits many years from now, how much will be paid each year for the benefits and how rapidly will the costs grow?

Mortality assumption: How long is a retiree likely to receive benefits?

Discount rate assumption: What is the present value of those future benefit payments in terms of today's dollars?

Since the liability is being recognized over the employee's whole career with the Town, the present value is divided into three pieces: the part that is attributed to past years (the "Total OPEB Liability" or "Past Service Liability"), the part that is being earned this year (the "Service Cost"), and the part that will be earned in future years (the "Future Service Liability").

Once the Accrued Liability and the Service Cost have been calculated, the next step is to determine an actuarially determined contribution. This is an amount that if paid annually would fully prefund the benefits for current active and retired employees. This consists of two pieces:

- ✓ Service Cost – because the benefits earned by active employees each year should be paid for each year
- ✓ Past Service Cost – a catch-up payment to fund the Accrued Liability over a period of time determined by an actuary

The final step is to keep track going forward of how much of the contribution is actually paid. There is no requirement to actually fund these benefits, but the cumulative deficiency must be disclosed on the Town's financial statements as the Net OPEB Liability (NOL). If you decide to fully fund the NOL this will appear in the financial statement as a Net OPEB Asset. In addition, the Discount Rate used to calculate the liabilities must reflect the expected investment income of whatever funds are set aside to prefund the benefits; if there is no prefunding then the Discount Rate will be much lower and the liabilities significantly higher than if the benefits are prefunded.

Commentary on Plan Experience and Contribution Amounts

1. **GASB 74/75 – How we got here:**

GASB 74 and 75 were designed to recognize the Other Postemployment Benefits (“OPEB”) earned by employees throughout their working career vs. when they are paid in retirement – accrual accounting vs. “pay-as-you-go” accounting while increasing disclosures to better reflect the plan’s liabilities and future funding requirements. Additionally, each eligible active employee earns benefits each year representing benefits to be paid in retirement or a “Service Cost”. These amounts are reflected in your financial statement each year so that OPEB benefits for an eligible employee shall be fully charged to the financial statement when that eligible employee terminates employment. Additionally, GASB 74 and 75 require increased disclosures comparable to those required under GASB 67 and 68 and interest rates used in the valuation are more closely tied to the plan’s underlying investment and funding policy.

2. **GASB 74 and 75 Impact**

The Town has adopted GASB 74 for the fiscal year ending June 30, 2017 and GASB 75 for the fiscal year ending June 30, 2018. The adoption of GASB 74/75 introduces a new actuarial cost method and discount rate as well as new disclosures and methodologies for reporting plan liabilities and OPEB expenses. Significant changes have been made to the recognition of OPEB expenses, making the comparison of Net OPEB Expense in the current valuation to the expenses reported under GASB 45 misleading. The liability reported on the Town’s balance sheet will increase dramatically as GASB 74/75 require the recognition of liabilities immediately rather than recognizing liabilities (Net OPEB Obligation) over a 30 year period as GASB 45 allowed. Please keep these changes in mind when considering any comparison to previously reported liabilities and expenses.

Commentary on Plan Experience and Contribution Amounts
(continued)

3. **Balance Sheet Items as of the Measurement Date**

	June 30, 2017	June 30, 2015
Total OPEB Liability	\$9,429,428	\$11,170,162
Fiduciary Net Position	\$146,837	\$26,144
Net OPEB Liability	\$9,282,591	\$11,144,018
Funded Ratio	1.56%	0.23%

5. **Income Statement Items as of the Fiscal Year Ending**

	June 30, 2018	June 30, 2016
Service Cost	\$279,591	\$458,868
Interest Expense	\$515,603	N/A
(Inflow)/Outflow from Plan Design Changes	\$0	N/A
(Inflow)/Outflow from Plan Experience	\$27,680	N/A
(Inflow)/Outflow from Changes in Assumptions	\$0	N/A
Projected Investment Earnings	\$(7,473)	N/A
(Inflow)/Outflow from Earnings on Investments	\$(729)	N/A
Employer Share of Costs	\$(380,287)	\$(301,184)
Employer Payments (Withdrawals) to/from Trust	\$(150,000)	\$0
Total Employer Payments	\$(530,287)	\$(301,184)
Other Changes	\$0	N/A
Net OPEB Expense	\$284,385	N/A
Interest Rate	5.50%	3.50%

SECTION II

SUMMARY OF PLAN PROVISIONS

<u>Effective Date</u>	GASB 45 is adopted July 1, 2009 GASB 74 is adopted for the fiscal year ending June 30, 2017 GASB 75 is adopted for the fiscal year ending June 30, 2018
<u>Plan Year</u>	July 1 through June 30.
<u>Eligibility</u>	An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
<u>Creditable Service</u>	Elapsed time from date of hire to termination of service date.
<u>Participant Contributions</u>	Retirees will pay 10%-25% of premiums for Medical (based on plan and retirement date), 25% of premiums for Dental & 25% of premiums for Life insurance.
<u>Benefits Offered</u>	Comprehensive Medical Insurance offered through Fallon Healthcare, Dental offered through Blue Cross Blue Shield, and Life insurance through Boston Mutual.
<u>Normal Retirement Date</u>	The normal retirement date is the first day of the month following a participant's 65th birthday.
<u>Early Retirement</u>	Early retirement is available for any participant who has attained benefit eligibility.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

A. ACTUARIAL COST METHOD

The actuarial cost method used to calculate the costs and liabilities of the plan is the Individual Entry Age Normal Actuarial Cost Method. Under this method, the annual normal cost for each individual active member, payable from the date of employment to the date of retirement, is sufficient to accumulate the value of the member's benefit at the time of retirement. The annual normal cost for each active member is a level percent of payroll. The actuarial accrued liability is the actuarial present value of the projected benefit times the ratio of past service to expected total service at retirement/termination.

Actuarial gains and losses are calculated each year and amortized into the OPEB expense. Gains and losses arising from plan design changes are recognized immediately. Gains and losses arising from differences between expected and actual investment returns are amortized over a five (5) year period. Gain and losses arising from differences between expected and actual plan experience and changes in actuarial assumptions are amortized over the remaining lifetime of all active and retired plan participants (4.85 years for the Town for the 2018 fiscal year).

All employees who are plan participants on the valuation date are included in the actuarial valuation.

B. ASSET VALUATION METHOD

The actuarial value of assets is equal to the Market Value of the Plan's assets as of the measurement date.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS

We used the following assumptions in this year's actuarial valuation:

Pre-Retirement Mortality

It is assumed that pre-retirement mortality is represented by the RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females

Post-Retirement Mortality

It is assumed that post-retirement mortality is represented by the RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females

Disabled Mortality

It is assumed that disabled mortality is represented by the RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females

Mortality Experience Study

The mortality assumptions reflect PERAC's recent experience analysis published in 2014 (based on the years 2006-2011), updated to reflect data through January 1, 2015 for post-retirement mortality, and professional judgement. As such, mortality assumptions reflect observed current mortality as well as expected mortality improvements.

Discount Rate

5.50% per annum (previously 3.50%)

Long Term Rate of Return

7.05% (based on investment policy)

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Municipal Bond Rate

3.13% as of June 30, 2017 (source: S&P Municipal Bond 20-Year High Grade Index - SAPIHG)

Employee Termination

It was assumed that employees would terminate employment in accordance with the sample rates shown in the following table:

Non-Public Safety Employees						
<u>Age</u>	<u>0-4 Years of Service (Males)</u>	<u>0-4 Years of Service (Females)</u>	<u>5-9 Years of Service (Males)</u>	<u>5-9 Years of Service (Females)</u>	<u>10+ Years of Service (Males)</u>	<u>10+ Years of Service (Females)</u>
20	27.00%	27.00%	12.00%	12.00%	6.00%	6.00%
30	23.00%	23.00%	10.00%	10.00%	5.50%	5.50%
40	16.00%	16.00%	8.00%	8.00%	3.50%	3.50%
50	18.00%	18.00%	6.00%	6.00%	3.00%	3.00%
60	18.00%	18.00%	5.00%	5.00%	3.50%	3.50%

Public Safety Employees		
<u>Service</u>	<u>Public Safety Male</u>	<u>Public Safety Female</u>
0	9.00%	9.00%
5	6.00%	6.00%
10	3.50%	3.50%
15	2.00%	2.00%
20	1.50%	1.50%
25	1.50%	1.50%
30	1.50%	1.50%

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Retirement Rates

It was assumed that the following percentage of eligible employees would retire each year:

<u>Age</u>	<u>Non Public Safety Male</u>	<u>Non Public Safety Female</u>	<u>Public Safety</u>
45	0.00%	0.00%	1.00%
46	0.00%	0.00%	1.00%
47	0.00%	0.00%	1.00%
48	0.00%	0.00%	1.00%
49	0.00%	0.00%	1.00%
50	1.00%	1.50%	2.00%
51	1.00%	1.50%	2.00%
52	1.00%	2.50%	2.00%
53	1.00%	2.50%	5.00%
54	2.00%	2.50%	7.50%
55	2.00%	5.50%	15.00%
56	2.50%	6.50%	10.00%
57	2.50%	6.50%	10.00%
58	5.00%	6.50%	10.00%
59	6.50%	6.50%	15.00%
60	12.00%	5.00%	20.00%
61	20.00%	13.00%	20.00%
62	30.00%	15.00%	25.00%
63	25.00%	12.50%	25.00%
64	22.00%	18.00%	30.00%
65	40.00%	15.00%	100.00%
66	25.00%	20.00%	100.00%
67	25.00%	20.00%	100.00%
68	30.00%	25.00%	100.00%
69	30.00%	20.00%	100.00%
70	100.00%	100.00%	100.00%
71	100.00%	100.00%	100.00%
72	100.00%	100.00%	100.00%

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

Disability rates

It was assumed that the following percentage of eligible employees would become permanently disabled each year:

<u>Age</u>	<u>Standard</u>	<u>Teachers</u>	<u>Public Safety</u>
20	0.01%	0.05%	0.20%
25	0.01%	0.06%	0.20%
30	0.01%	0.07%	0.21%
35	0.03%	0.10%	0.40%
40	0.07%	0.21%	0.71%
45	0.10%	0.30%	1.00%
50	0.13%	0.42%	1.10%
55	0.14%	0.50%	0.80%
60	0.12%	0.50%	0.80%

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Healthcare Trend

It was assumed that healthcare costs would increase in accordance with the trend rates in the following table:

<u>Year</u>	<u>Medical</u>	<u>Dental</u>
FY 2013	6.0%	5.5%
FY 2014	5.0%	5.0%
FY 2015	5.0%	5.0%
FY 2016	5.0%	5.0%
FY 2017	5.0%	5.0%
FY 2018	5.0%	5.0%
FY 2019	5.0%	5.0%
FY 2020+	5.0%	5.0%

Participation Rate

It was assumed that 90% of employees eligible to receive retirement benefits would enroll in the retiree medical plans upon retirement. For life and dental insurance plans, it was assumed that 80% of eligible employees would elect coverage upon retirement.

Percent Married

It was assumed that 80% of male participants and 70% of female participants who elect retiree healthcare coverage for themselves would also elect coverage for a spouse upon retirement. It was further assumed that a male spouse is three years older than a female spouse and same sex spouses are assumed to be the same age. For current retirees, the actual census information was used.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

C. ACTUARIAL ASSUMPTIONS (continued)

Compensation Increases

3.00% per year.

Open Group Forecast

It was assumed for projecting plan liabilities in future years that the active population would remain unchanged and that those who terminate employment or retire will be replace with new employees with the demographics below:

Open Group Forecast Population Demographics

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	8.0%	5.0%
30	7.0%	14.0%
40	20.0%	19.0%
50	10.0%	10.0%
60	<u>3.0%</u>	<u>4.0%</u>
Total	48.0%	52.0%

Additional Comments

The values in this report reflect a closed group and do not reflect any new entrants after the valuation date.

For purposes of this valuation, retiree contributions were assumed to increase with the same trend rate as health care claims.

Medicare Part B Penalties are not reflected

Medicare Part B Reimbursement is not reflected

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

As part of the Other Post-Employment Benefits Program, there are situations where the cost is borne partly or entirely on the retirees. In most cases, the premium that is used to split the cost is lower than the true cost of providing the medical benefits, for two reasons:

- ✓ The cost sharing program is usually a fixed amount such as a COBRA premium that does not take into account the age of the retiree and his/her dependents. Since medical costs generally increase with age, the cost sharing premium is often lower than the true cost of the medical benefits:
- ✓ The cost sharing premium is usually a blended rate that takes into account the cost of medical benefits for active employees as well as retirees. Medical costs are generally higher for retirees than for active employees of the same age. This means that, again, the cost sharing premium is often lower than the true cost of the medical benefits.

Because of these two factors, a retiree who is paying 100% of the cost sharing premium is most likely not paying 100% of the true cost of the medical benefits. This situation is known as an “implicit subsidy”. GASB 74 and 75 require the plan sponsor to measure the liability for this subsidy; that is, the difference between the true cost of the medical benefits and the cost sharing premiums paid by the retiree. Actuarial Standard of Practice No. 6 (“ASOP 6”) requires us to recognize this implicit subsidy while the plan sponsor may only pay the premiums billed by an insurance provider. To do this, our valuation consists of several steps:

First, we calculate the liability for the true cost of medical benefits expected to be received by retirees and their dependents. This liability is based on factors developed by actuaries that reflect how the cost of medical benefits varies by age and gender, as well as the other assumptions discussed on the prior page.

Next, we calculate the liability for the future premiums expected to be paid by the retiree for their own and their dependents’ coverage. This liability is based on the current premium rates without adjustment for age or gender. It also is based on the terms of the retiree medical program – different retirees pay different percentages based on their union, date of retirement, age at retirement, and other factors.

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

I. CLAIMS COSTS DEVELOPMENT - Based on Active & Retiree Incurred Claims & Premiums

	Number of Participants			
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>	<u>Total</u>
Fallon Select	24		36	60
Fallon Direct	1		1	2
Fallon PPO - in State			1	1
Fallon Companion Care	31	16		47
Total	56	16	38	110

	Per Contract Costs (monthly) - FY 2018		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
Fallon Select	894.07	0.00	2,391.44
Fallon Direct	804.66	0.00	2,152.31
Fallon PPO - in State	1,130.68	0.00	3,024.32
Fallon Companion Care	318.79	637.58	

Gross Expected FY 2018 Incurred Premiums	1,603,375
Adjustment to reflect children's claims	(276,297)
Total Expected FY 2018 Incurred Premiums (adults only)	1,327,078

II. PRE-65 AND POST-65 PER CAPITA RETIREE ANNUAL CLAIM COSTS

	<u>Employer</u> <u>Primary</u>	<u>Medicare</u> <u>Primary</u>
Age 65	17,178	3,464
Average Age	11,291	3,825

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS (continued)

D. DEVELOPMENT OF REPRESENTATIVE MEDICAL PER CAPITA CLAIMS COSTS

III. BREAKDOWN OF CLAIM COSTS

ALL ACTIVE EMPLOYEES AND SPOUSES

Age Bracket	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
24 & Under	1.312	0.549	10,053	4,206	4,206
25 to 29	1.312	0.591	10,053	4,528	34,687
30 to 34	1.312	0.712	10,053	5,455	57,434
35 to 39	1.312	0.850	10,053	6,513	63,291
40 to 44	1.312	1.000	10,053	7,662	119,223
45 to 49	1.456	1.193	11,156	9,141	88,314
50 to 54	1.599	1.441	12,252	11,041	129,928
55 to 59	1.740	1.753	13,332	13,431	160,677
60 to 64	1.968	2.102	15,079	16,106	92,528
65 to 69	2.168	2.316	16,611	17,745	118,545
70 & Over	2.396	2.557	18,358	19,592	<u>57,542</u>
Total					926,375

ALL RETIREES AND SPOUSES - NOT MEDICARE ELIGIBLE

Age Bracket	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
44 & Under	1.312	1.000	10,053	7,662	0
45 to 49	1.456	1.193	11,156	9,141	11,156
50 to 54	1.599	1.441	12,252	11,041	11,041
55 to 59	1.740	1.753	13,332	13,431	53,328
60 to 64	1.968	2.102	15,079	16,106	137,765
65 to 69	2.168	2.316	16,611	17,745	0
70 to 74	2.396	2.557	18,358	19,592	0
75 to 79	2.593	2.769	19,868	21,216	0
80 to 84	2.724	2.910	20,871	22,296	0
85 to 89	2.864	3.059	21,944	23,438	0
90 & Over	3.010	3.215	23,063	24,633	<u>0</u>
Total					213,290

ALL RETIREES AND SPOUSES - MEDICARE ELIGIBLE

Age Bracket	Female Aging Factor	Male Aging Factor	Aged (F) Average Claims	Aged (M) Average Claims	Age Related Claims
65 to 69	2.168	2.316	3,349	3,578	45,900
70 to 74	2.396	2.557	3,701	3,950	34,425
75 to 79	2.593	2.769	4,005	4,277	45,900
80 to 84	2.724	2.910	4,208	4,495	19,125
85 to 89	2.864	3.059	4,424	4,725	26,775
90 & Over	3.010	3.215	4,650	4,966	<u>15,300</u>
Total					187,425
Grand Totals					1,327,090

SECTION III

ACTUARIAL COST METHOD, ASSET VALUATION METHOD AND ACTUARIAL ASSUMPTIONS

(continued)

E. DEVELOPMENT OF REPRESENTATIVE DENTAL PER CAPITA CLAIMS COSTS

I. CLAIMS COSTS DEVELOPMENT - with Active & Retiree Incurred Premiums

	Per Contract Costs (monthly) - FY 2018		
	<u>Single</u>	<u>Two-Person</u>	<u>Family</u>
Dental Plan	52.52		110.45

FY 2018 Expected Per Person Rate 630

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date)

The GASB Standards for accounting and financial reporting for postemployment benefits other than pensions require the following disclosures in the financial statements related to the retiree medical, dental and life insurance benefits;

1. A DESCRIPTION OF THE RETIREE MEDICAL INSURANCE PROGRAM:

- a. Plan Type: Comprehensive Medical & Medicare Supplement coverages through Fallon Healthcare.
- b. Administrator: Town of Sterling
- c. Eligibility: An employee hired before April 2, 2012 shall become eligible to retire under this plan upon attainment of age 55 as an active member and completion of 10 years of service or an employee shall be able to retire with 20 years of service regardless of age. Those hired on or after April 2, 2012 shall be eligible to retire upon attainment of age 60 with 10 years of creditable service.
- d. Cost Sharing: For Non-Medicare integrated plans, employees who retired before 7/1/2009 pay 10%-25% of premiums and all other employees pay 20%-25% of premiums upon retirement. Retirees pay 25% of premiums for Medicare integrated plans.

2. A DESCRIPTION OF THE RETIREE DENTAL INSURANCE PROGRAM:

- a. Plan Type: Comprehensive Dental via Blue Cross Blue Shield
- b. Administrator: Town of Sterling
- c. Eligibility: Same as above
- d. Cost sharing: Employees pay 25% of premiums in retirement.

3. A DESCRIPTION OF THE RETIREE LIFE INSURANCE PROGRAM:

- a. Plan Type: Group Term Life Insurance - \$5,000
- b. Administrator: Town of Sterling
- c. Eligibility: Same as above
- d. Cost sharing: Employees pay 25% of premiums in retirement.

EXHIBIT AFinancial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)**4. RETIREE MEDICAL AND LIFE INSURANCE CONTRIBUTIONS:**

Group	Individual	Family
Medical	10%-25%	10%-25%
Dental	25%	25%
Life	25%	N/A

5. FUNDING POLICY

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. For the 2018 fiscal year, total Town premiums plus implicit costs for the retiree medical program are \$380,287. The Town is also projected to make a contribution to an OPEB Trust of \$150,000 for the 2018 fiscal year for a total contribution of \$530,287.

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

6. INVESTMENT POLICY

The chart below shows how the long-term rate of return on assets is developed based on the Town's Investment Policy Statement.

Investment Target Allocation & Expected Long-Term Real Rate of Return			
Asset Class	Target Allocation	Asset Class	Long-Term Expected Real Rate of Return
Domestic Equity - Large Cap	23.25%	Domestic Equity - Large Cap	4.00%
Domestic Equity - Small/Mid Cap	11.75%	Domestic Equity - Small/Mid Cap	6.00%
International Equity - Developed Market	13.25%	International Equity - Developed Market	4.50%
International Equity-Emerging Market	6.75%	International Equity-Emerging Market	7.00%
Domestic Fixed Income	20.00%	Domestic Fixed Income	2.00%
International Fixed Income	5.00%	International Fixed Income	3.00%
Alternatives	20.00%	Alternatives	6.50%
Real Estate	0.00%	Real Estate	6.25%
Cash	0.00%	Cash	0.00%
Total	100.00%		
		I. Real Rate of Return	4.55%
		II. Inflation Assumption	2.75%
		III. Total Nominal Return [I. + II.]	7.30%
		IV. Investment Expense	0.25%
		V. Net Investment Return [III.-IV.]	7.05%

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

7. ACTUARIALLY DETERMINED CONTRIBUTION (ADC)

The Town's Actuarially Determined Contribution (ADC) is an amount actuarially determined in accordance with the parameters of GASB Statement No. 74/75 which represents a level of funding that, if paid on an ongoing basis, is projected to cover the service cost each year and amortize any unfunded actuarial liabilities (or funding excess). The following table shows the components of the Town's annual ADC for the fiscal year and the amount actually contributed to the plan:

Actuarially Determined Contribution - Deficiency / (Excess)	
<u>For the Fiscal Year Ending June 30, 2018</u>	
I. Service Cost	279,591
II. 30 year amortization of NOL at 5.50%	<u>605,396</u>
III. Actuarial Determined Contribution [I. + II.]	884,987
IV. Contributions in relation to the actuarially determined contribution	<u>(530,287)</u>
V. Contribution deficiency / (excess) [III. + IV.]	<u>354,700</u>
Covered employee payroll	3,925,073
Contributions as a % of covered employee payroll	13.51%

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

8. FUNDED STATUS AND FUNDING PROGRESS

As of the June 30, 2017 Measurement Date, the plan was 1.56% funded. The Total OPEB Liability (TOL) for benefits was \$9,429,428, and the Fiduciary Net Position was \$146,837, resulting in a Net OPEB Liability (NOL) of \$9,282,591. The covered payroll (annual payroll of active employees covered by the plan) was \$ 3,925,073 and the ratio of the NOL to the covered payroll was 236.5%.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the actuarially determined contribution of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented in the required supplementary information following the financial statements, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the Total OPEB Liabilities for benefits.

Measurement Date	Fiduciary Net Position	Total OPEB Liability	Net OPEB Liability	Funded Ratio	Covered Payroll	NOL as a % of Covered Payroll
06/30/2019 (est.)	\$489,607	\$10,269,834	\$9,780,227	4.8%	\$4,164,110	234.9%
06/30/2018 (est.)	\$312,386	\$9,852,411	\$9,540,025	3.2%	\$4,042,825	236.0%
06/30/2017	\$146,837	\$9,429,428	\$9,282,591	1.6%	\$3,925,073	236.5%
06/30/2016	\$26,943	\$11,504,854	\$11,477,911	0.2%	\$3,535,108	324.7%
06/30/2015	\$26,144	\$11,170,162	\$11,144,018	0.2%	\$3,432,144	324.7%
06/30/2014	\$14,150	\$12,925,916	\$12,911,766	0.1%	N/A	N/A

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

9. FIDUCIARY NET POSITION

Statement of Fiduciary Net Position		
June 30, 2017 and June 30, 2018		
	<u>June 30, 2018 (Projected)</u>	<u>June 30, 2017</u>
Assets		
I. Cash and cash equivalents	0	0
<u>Receivables & Prepaid expenses:</u>		
II. Contributions	0	0
III. Investment Income	0	0
IV. Receivables from brokers for unsettled trades	0	0
V. Prepaid expenses	0	0
VI. Total Receivables [II.+III.+IV.+V.]	0	0
<u>OPEB Trust Investments:</u>		
VII. Fixed Income	78,097	36,710
VIII. Stocks	171,812	80,760
IX. Cash and cash equivalents	0	0
X. Real estate	0	0
XI. Alternative investments	62,477	29,367
XII. Total Investments [VII.+VIII.+IX.+X.+XI.]	312,386	146,837
Invested securities lending cash collateral	0	0
Capital assets, net of accumulated depreciation	0	0
Total Assets	312,386	146,837
Liabilities		
XIII. Accrued expenses and benefits payable	0	0
XIV. Securities lending cash collateral	0	0
XV. Payable to brokers for unsettled trades	0	0
XVI. Total liabilities [XIII.+XIV.+XV.]	0	0
XVII. Net Position restricted for OPEB [XII.-XVI.]	312,386	146,837

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

9. FIDUCIARY NET POSITION (CONTINUED)

Statement of Changes in Fiduciary Net Position for the Year ended June 30, 2018 (Projected)	
	<u>June 30, 2017</u>
Additions	
<u>Contributions</u>	
Employer Contributions to OPEB Trust	<u>150,000</u>
Total Contributions	150,000
<u>Investment Income / (loss)</u>	
Interest	1,836
Dividends	1,615
Equity fund income, net	0
Net increase in fair value of investments	12,098
Securities lending income	0
Less investment expenses:	
Direct investment expense	0
Securities lending management fees	0
Securities lending borrower rebates	<u>0</u>
Net investment income	15,549
Other income	<u>0</u>
Total Additions	<u>165,549</u>
Deductions	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	<u>0</u>
Total deductions	<u>0</u>
Net increase (decrease)	165,549
Net Position restricted for OPEB	
Beginning of year	<u>146,837</u>
End of year	312,386

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

10. OPEB LIABILITY, OPEB EXPENSE AND ADC

Fiscal Year Ending June 30, 2018						
	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	DPW Employees and Retirees	Water Enterprise Fund Employees and Retirees	Total
I. Total OPEB Liability	4,922,088	2,393,525	798,771	1,013,291	301,753	9,429,428
II. Fiduciary Net Position as of June 30, 2017	76,329	37,461	12,548	15,812	4,687	146,837
III. Net OPEB Liability (Asset) [I.-II.]	4,845,759	2,356,064	786,223	997,479	297,066	9,282,591
IV. Service Cost	92,635	112,411	65,793	61,239	24,848	356,926
V. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	228,968	138,158	47,326	59,067	17,754	491,273
VI. Change in Deferred (Inflows)/Outflows from Plan Design Changes	-	-	-	-	-	-
VII. Change in Deferred (Inflows)/Outflows from Plan Experience	70,074	34,081	11,369	14,429	4,297	134,250
VIII. Change in Deferred (Inflows)/Outflows from Changes in Assumptions	-	-	-	-	-	-
IX. Projected Earnings on OPEB plan investments	(2,478,000)	(1,216)	(408)	(514)	(152)	(4,768)
X. Change in Deferred (Inflows)/Outflows from Earnings on Investments	(3,371)	(114)	(45)	(56)	(58)	(3,644)
XI. Employer Share of Costs	(286,186)	(9,688)	(3,823)	(4,729)	(4,931)	(309,357)
XII. Employer Payments (Withdrawals) to/from OPEB Trust	(54,796)	(29,094)	(9,962)	(12,434)	(3,714)	(110,000)
XIII. Total Employer Contribution [X.+XI.]	(340,982)	(38,782)	(13,785)	(17,163)	(8,645)	(419,357)
XIV. Net OPEB Expense [IV.+V.+VI.+VII.+VIII.+IX.+X.+XIII.]	44,846	244,538	110,250	117,002	38,044	554,680
XV. Actuarial Determined Contribution (ADC)	388,597	241,714	102,814	113,024	38,838	884,987
XVI. Total Expected Contribution	340,982	38,782	13,785	17,163	8,645	419,357
XVII. Percentage of ADC Contributed [XVI./XV.]	88%	16%	13%	15%	22%	47%

Fiscal Year Ending June 30, 2019						
	Town Employees and Retirees	Police Employees and Retirees	Fire Employees and Retirees	DPW Employees and Retirees	Water Enterprise Fund Employees and Retirees	Total
I. Total OPEB Liability	4,908,011	2,605,835	892,248	1,113,660	332,657	9,852,411
II. Fiduciary Net Position as of June 30, 2018	179,790	70,204	23,740	29,792	8,860	312,386
III. Net OPEB Liability (Asset) [I.-II.]	4,728,221	2,535,631	868,508	1,083,868	323,797	9,540,025
IV. Service Cost	72,564	88,055	51,538	47,970	19,464	279,591
V. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	240,308	145,000	49,670	61,992	18,633	515,603
VI. Change in Deferred (Inflows)/Outflows from Plan Design Changes	-	-	-	-	-	-
VII. Change in Deferred (Inflows)/Outflows from Plan Experience	14,448	7,027	2,344	2,975	886	27,680
VIII. Change in Deferred (Inflows)/Outflows from Changes in Assumptions	-	-	-	-	-	-
IX. Projected Earnings on OPEB plan investments	(3,884)	(1,906)	(639)	(805)	(239)	(7,473)
X. Change in Deferred (Inflows)/Outflows from Earnings on Investments	(380)	(186)	(62)	(78)	(23)	(729)
XI. Employer Share of Costs	(351,803)	(11,909)	(4,700)	(5,813)	(6,062)	(380,287)
XII. Employer Payments (Withdrawals) to/from OPEB Trust	(74,723)	(39,673)	(13,584)	(16,955)	(5,065)	(150,000)
XIII. Total Employer Contribution [X.+XI.]	(426,526)	(51,582)	(18,284)	(22,768)	(11,127)	(530,287)
XIV. Net OPEB Expense [IV.+V.+VI.+VII.+VIII.+IX.+X.+XIII.]	(103,470)	186,408	84,567	89,286	27,594	284,385
XV. Actuarial Determined Contribution (ADC)	380,931	253,425	108,181	118,658	40,582	901,777
XVI. Total Expected Contribution	426,526	51,582	18,284	22,768	11,127	530,287
XVII. Percentage of ADC Contributed [XVI./XV.]	112%	20%	17%	19%	27%	59%

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

11. OPEB LIABILITY, OPEB EXPENSE AND DEFERRED INFLOW/OUTFLOW

Net OPEB Liability		
	For the Fiscal Year Ending	
	June 30, 2018	June 30, 2019
Net OPEB Liability at beginning of period	8,727,911	9,282,591
Net OPEB Expense - Excluding Payments	843,431	814,672
Total Contributions	(419,357)	(530,287)
Change in Deferred Outflow	134,250	(27,680)
Change in Deferred Inflow	(3,644)	729
Net OPEB Liability at end of period	9,282,591	9,540,025

Net OPEB Expense		
	For the period ending on the	
	Measurement Date	
	June 30, 2017	June 30, 2018
Service Cost	356,926	279,591
Interest on Net OPEB Liability, Service Cost, and Payments	491,273	515,603
Deferral Amount	620,755	26,951
Expected Investment Income	(4,768)	(7,473)
Contributions to Trust	(110,000)	(150,000)
Benefit Payments	(309,357)	(380,287)

Deferred Inflow/Outflow		
	For the period ending on the	
	Measurement Date	
	June 30, 2017	June 30, 2018
Deferred (Inflow)/Outflow from Actual vs. Expected Experience	134,250	106,570
Deferred (Inflow)/Outflow from Investment Experience	(3,644)	(2,915)
Deferred (Inflow)/Outflow from Changes in Benefit Terms	0	0
Deferred (Inflow)/Outflow from Changes in Assumptions	0	0

Measurement Date
June 30, 2017 June 30, 2018

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

12. EFFECT OF 1% CHANGE IN HEALTHCARE TREND

In the event that healthcare trend rates were 1% higher than forecast and employee contributions were to increase at the forecast rates, the Net OPEB Liability would increase to \$11,362,246 or by 22.4% and the corresponding Service Cost would increase to \$374,008 or by 33.8%. If such healthcare trend rates were 1% less than forecast and employee contributions were to increase at the forecast rate, the Net OPEB Liability would decrease to \$7,642,149 or by 17.7% and the corresponding Service Cost would decrease to \$209,197 or by 25.2%.

Impact of a 1% Change in the Healthcare Trend Rate as of the June 30, 2017 Measurement Date

	<u>1% Decrease (4.00%)</u>	<u>Current Trend Rate (5.00%)</u>	<u>1% Increase (6.00%)</u>
Net OPEB Liability	7,642,149	9,282,591	11,362,246
Service Cost	209,197	279,591	374,008

13. EFFECT OF 1% CHANGE IN DISCOUNT RATES

If the discount rate were 1% higher than what was used in this valuation, the Net OPEB Liability would decrease to \$8,166,671 or by 12.0% and the corresponding Service Cost would decrease to \$221,838 or by 20.7%. If the discount rate were 1% lower than was used in this valuation, the Net OPEB Liability would increase to \$10,661,183 or by 14.9% and the corresponding Service Cost would increase to \$356,428 or by 27.5%.

Impact of a 1% Change in the Discount Rate as of the June 30, 2017 Measurement Date

	<u>1% Decrease (4.50%)</u>	<u>Current Discount Rate (5.50%)</u>	<u>1% Increase (6.50%)</u>
Net OPEB Liability	10,661,183	9,282,591	8,166,671
Service Cost	356,428	279,591	221,838

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

14. ACTUARIAL METHODS AND ASSUMPTIONS

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

Actuarial Cost Method: Individual Entry Age Normal
Discount Rate: 5.50% per annum (previously 3.50%)
Healthcare Trend Rates

<u>Year</u>	<u>Medical</u>	<u>Dental</u>
FY 2013	6.0%	5.5%
FY 2014	5.0%	5.0%
FY 2015	5.0%	5.0%
FY 2016	5.0%	5.0%
FY 2017	5.0%	5.0%
FY 2018	5.0%	5.0%
FY 2019	5.0%	5.0%
FY 2020+	5.0%	5.0%

General Inflation Assumption: 2.75% per annum
Annual Compensation Increases: 3.00% per annum
Actuarial Value of Assets: Market Value

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

15. RECOGNITION OF OPEB TRUST ASSETS

The State of Massachusetts has passed legislation allowing municipal entities to establish a Trust for Other Postemployment Benefits ("OPEB") under M.G.L. Chapter 32B, Section 20 for purposes of accumulating assets to pre-fund the liabilities under GASB 75. This legislation was amended effective November 9, 2016 to clarify who may adopt such a Trust and provide guidance on the ongoing operation of such a Trust. To the best of our knowledge, the Town of Sterling has established an irrevocable trust for the purposes of prefunding liabilities under GASB 74/75.

16. OPEB EXPENSE DEVELOPMENT

Components of the Town's OPEB Expenses for the Fiscal Year Ending June 30, 2018	
Description	Amount
I. Service Cost	279,591
II. Interest on Net OPEB Liability (Asset), Service Cost, and Benefit Payments	515,603
III. Deferred (Inflows)/Outflows from Plan Design Changes*	0
IV. Deferred (Inflows)/Outflows from Plan Experience**	27,680
V. Deferred (Inflows)/Outflows from Changes of Assumptions**	0
VI. Projected earnings on OPEB plan investments	(7,473)
VII. Deferred (Inflows)/Outflows from Earnings on Plan Investments***	(729)
VIII. Total Employer Contributions	(530,287)
IX. OPEB Plan administrative expense	0
X. Other changes in fiduciary net position	0
XI. Net OPEB expense [I.+II.+III.+IV.+V.+VI.+VII.+VIII.+IX.+ X.]	284,385

* Recognized Immediately

** Amortized over 4.85 years

*** Amortized over 5 years

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

17. CHANGES IN NET OPEB LIABILITY

Changes in Net OPEB Liability			
	Increase (Decrease)		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
I. Balances at June 30, 2016 GASB 45	11,504,854	26,943	11,477,911
II. Change in Assumptions for GASB 75	<u>(2,750,000)</u>	<u>0</u>	<u>(2,750,000)</u>
III. Balances at June 30, 2016 GASB 75 [I. + II.]	8,754,854	26,943	8,727,911
Changes for the year:			
IV. Service Cost	356,926	0	356,926
V. Interest on Net OPEB Liability, Service Cost, and Benefit Payments	492,755	1,482	491,273
VI. Changes in Benefit terms *	0	0	0
VII. Change in assumptions **	0	0	0
VIII. Differences between actual and expected experience **	134,250	3,644	130,606
IX. Net Investment Income	0	4,768	(4,768)
X. Employer Contributions to Trust	0	419,357	(419,357)
XI. Benefit Payments Withdrawn from Trust	0	(309,357)	309,357
XII. Benefit payments excluding Implicit Cost	N/A	0	N/A
XIII. Implicit Cost amount	N/A	0	N/A
XIV. Total Benefit payments including Implicit Cost [XII. + XIII.]	(309,357)	0	(309,357)
XV. Administrative expense	0	0	0
XVI. Other Charges	0	0	0
XVII. Net Changes [IV.+V.+VI.+VII.+VIII.+IX.+X.+XI.+XIV.+XV.+XVI.]	674,574	119,894	554,680
XVII. Balances at June 30, 2017 [III.+XVII.]	9,429,428	146,837	9,282,591

* Recognized Immediately

** Amortized over 4.85 years

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

18. MONEY WEIGHTED RATE OF RETURN

Determination of Beginning & Ending Balances of OPEB Plan Investments for Purposes of Calculating the Annual Money-Weighted Rate of Return		
	Ending OPEB Plan Investments *	Beginning OPEB Plan Investments **
Assets		
Cash and cash equivalents	0	0
Receivables:		
Investment income	0	0
Receivables from brokers for unsettled trades	0	0
Investments		
Fixed income	78,097	36,710
Stocks	171,812	80,760
Cash and cash equivalents	0	0
Real estate	0	0
Alternative investments	62,477	29,367
Invested securities lending cash collateral	0	0
Liabilities		
Securities lending cash collateral	0	0
Payable to brokers for unsettled trades	0	0
Total OPEB plan investments	312,386	146,837
* From balances at June 30, 2018 (Projected)		
** From balances at June 30, 2017		

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

18. MONEY WEIGHTED RATE OF RETURN (CONTINUED)

	Plan Investments / Net External	Periods Invested	Period Weight
Beginning value - July 1, 2016	26,943	12	1.0000
Monthly net external cash flows:			
July	0	11	0.9167
August	0	10	0.8333
September	0	9	0.7500
October	0	8	0.6667
November	0	7	0.5833
December	110,000	6	0.5000
January	0	5	0.4167
February	0	4	0.3333
March	0	3	0.2500
April	0	2	0.1667
May	0	1	0.0833
June	0	0	0.0000
Ending value - June 30, 2017	146,837		
Money Weighted Rate of Return	12.31%		
Asset Value - June 30, 2017	146,837		

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

19. PLAN CASH FLOWS

Aggregate External (Noninvestment Cash Flows)	
	<u>June 30, 2018</u>
Additions	
<u>Contributions</u>	
Member contributions	0
Employer contributions	150,000
Other income	0
Deductions	
Service benefits	0
Disability benefits	0
Death benefits	0
Refunds	0
Administrative expenses	0
Beginning balances of noninvestment-related assets and liabilities *	
Contribution receivable	0
Prepaid expenses	0
Accrued expenses & benefits payable	0
Ending balances of noninvestment-related assets and liabilities **	
Contribution receivable	0
Prepaid expenses	0
Accrued expenses & benefits payable	0
Change in capital assets - depreciation	0
Aggregate external cash flows	150,000
* From balances at June 30, 2018 (Projected)	
** From balances at June 30, 2017	

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

19. PLAN CASH FLOWS (CONTINUED)

Reconciliation of Beginning & Ending Balances of OPEB Plan Investments, Aggregate External Cash Flows, and Net Investment Income	
	<u>June 30, 2018 (Projected)</u>
I. Total OPEB plan investments, beginning of year	146,837
II. Aggregate external cash flows	150,000
III. Net investment income	<u>15,549</u>
IV. Total OPEB plan investments, end of year [I.+II.+III.]	<u><u>312,386</u></u>

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

20. PLAN PROJECTION DISCLOSURES

Projection of Contributions using a June 30, 2017 Valuation Date

Fiscal Year	I. Payroll for current employees	II. Payroll for future employees	III. Total employee payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
2018	3,925,073	0	3,925,073	0	380,287	0	380,287
2019	3,528,791	514,034	4,042,825	0	395,170	0	395,170
2020	3,367,667	796,443	4,164,110	0	400,155	0	400,155
2021	3,235,261	1,053,772	4,289,033	0	430,555	0	430,555
2022	2,978,496	1,439,208	4,417,704	0	482,599	0	482,599
2023	2,840,772	1,709,463	4,550,235	0	503,665	0	503,665
2024	2,704,343	1,982,399	4,686,742	0	543,286	0	543,286
2025	2,561,398	2,265,946	4,827,344	0	550,331	0	550,331
2026	2,374,394	2,597,770	4,972,164	0	557,381	0	557,381
2027	2,258,297	2,863,032	5,121,329	0	599,563	0	599,563
2028	2,115,647	3,159,322	5,274,969	0	625,662	0	625,662
2029	2,001,800	3,431,418	5,433,218	0	641,494	4,474	645,968
2030	1,887,234	3,708,981	5,596,215	0	689,614	13,153	702,767
2031	1,797,893	3,966,208	5,764,101	0	691,528	24,645	716,173
2032	1,706,929	4,230,095	5,937,024	0	690,551	39,559	730,110
2033	1,599,264	4,515,871	6,115,135	0	748,270	58,635	806,905
2034	1,515,202	4,783,387	6,298,589	0	768,410	71,244	839,654
2035	1,433,600	5,053,947	6,487,547	0	791,696	84,942	876,638
2036	1,338,980	5,343,193	6,682,173	0	808,897	102,923	911,820
2037	1,218,729	5,663,909	6,882,638	0	843,907	117,593	961,500
2038	1,117,625	5,971,492	7,089,117	0	894,531	131,043	1,025,574
2039	1,015,933	6,285,858	7,301,791	0	901,021	154,253	1,055,274
2040	921,581	6,599,264	7,520,845	0	907,918	186,746	1,094,664
2041	818,953	6,927,517	7,746,470	0	924,437	226,016	1,150,453
2042	744,730	7,234,134	7,978,864	0	931,566	272,975	1,204,541
2043	671,698	7,546,532	8,218,230	0	908,044	329,172	1,237,216
2044	591,541	7,873,236	8,464,777	0	901,143	371,694	1,272,837
2045	537,199	8,181,521	8,718,720	0	932,931	416,647	1,349,578
2046	477,086	8,503,196	8,980,282	0	909,863	472,190	1,382,053
2047	413,807	8,835,883	9,249,690	0	948,396	520,673	1,469,069
2048	350,607	9,176,574	9,527,181	0	979,257	568,551	1,547,808
2049	292,961	9,520,035	9,812,996	0	968,974	628,959	1,597,933
2050	252,690	9,854,696	10,107,386	0	926,835	695,986	1,622,821
2051	204,143	10,206,465	10,410,608	0	872,936	766,624	1,639,560
2052	180,194	10,542,732	10,722,926	0	846,114	842,802	1,688,916
2053	155,178	10,889,436	11,044,614	0	794,536	927,891	1,722,427
2054	132,020	11,243,932	11,375,952	0	771,654	1,010,499	1,782,153
2055	107,338	11,609,893	11,717,231	0	732,868	1,097,302	1,830,170
2056	83,251	11,985,497	12,068,748	0	725,651	1,192,918	1,918,569
2057	69,363	12,361,447	12,430,810	0	719,394	1,291,105	2,010,499

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

Projection of Contributions using a June 30, 2017 Valuation Date (Continued)

Fiscal Year	I. Payroll for current employees	II. Payroll for future employees	III. Total employee payroll [I.+II.]	IV. Contributions from current employees	V. Employer Payments for current plan members	VI. Employer Payments for future employees	VII. Total Payments [IV.+V.+VI.]
2058	53,931	12,749,803	12,803,734	0	718,402	1,395,396	2,113,798
2059	41,207	13,146,639	13,187,846	0	714,428	1,508,355	2,222,783
2060	23,969	13,559,512	13,583,481	0	695,391	1,629,877	2,325,268
2061	12,200	13,978,785	13,990,985	0	680,111	1,759,544	2,439,655
2062	7,425	14,403,290	14,410,715	0	668,483	1,895,334	2,563,817
2063	5,698	14,837,338	14,843,036	0	648,936	2,039,868	2,688,804
2064	4,226	15,284,101	15,288,327	0	629,073	2,188,602	2,817,675
2065	1,577	15,745,400	15,746,977	0	613,319	2,343,922	2,957,241
2066	0	16,219,386	16,219,386	0	596,234	2,508,037	3,104,271
2067	0	16,705,968	16,705,968	0	577,756	2,678,209	3,255,965
2068	0	17,207,147	17,207,147	0	558,312	2,857,184	3,415,496
2069	0	17,723,361	17,723,361	0	537,768	3,045,755	3,583,523
2070	0	18,255,062	18,255,062	0	516,255	3,243,563	3,759,818
2071	0	18,802,714	18,802,714	0	493,725	3,451,456	3,945,181
2072	0	19,366,795	19,366,795	0	470,318	3,667,630	4,137,948
2073	0	19,947,799	19,947,799	0	446,125	3,894,209	4,340,334
2074	0	20,546,233	20,546,233	0	421,372	4,131,775	4,553,147
2075	0	21,162,620	21,162,620	0	396,092	4,378,773	4,774,865
2076	0	21,797,499	21,797,499	0	370,406	4,637,442	5,007,848
2077	0	22,451,424	22,451,424	0	344,612	4,908,102	5,252,714
2078	0	23,124,967	23,124,967	0	319,352	5,192,648	5,512,000
2079	0	23,818,716	23,818,716	0	295,538	5,490,459	5,785,997
2080	0	24,533,277	24,533,277	0	271,665	5,802,638	6,074,303
2081	0	25,269,275	25,269,275	0	247,450	6,131,031	6,378,481
2082	0	26,027,353	26,027,353	0	223,462	6,474,700	6,698,162
2083	0	26,808,174	26,808,174	0	199,735	6,835,095	7,034,830
2084	0	27,612,419	27,612,419	0	176,890	7,213,687	7,390,577
2085	0	28,440,792	28,440,792	0	155,118	7,609,971	7,765,089
2086	0	29,294,016	29,294,016	0	134,858	8,025,253	8,160,111
2087	0	30,172,836	30,172,836	0	116,297	8,461,630	8,577,927
2088	0	31,078,021	31,078,021	0	99,430	8,920,293	9,019,723
2089	0	32,010,362	32,010,362	0	84,539	9,401,624	9,486,163
2090	0	32,970,673	32,970,673	0	71,146	9,907,422	9,978,568
2091	0	33,959,793	33,959,793	0	59,479	10,439,379	10,498,858
2092	0	34,978,587	34,978,587	0	49,086	10,998,201	11,047,287
2093	0	36,027,945	36,027,945	0	40,097	11,585,343	11,625,440
2094	0	37,108,783	37,108,783	0	32,294	12,202,472	12,234,766
2095	0	38,222,046	38,222,046	0	25,700	12,850,606	12,876,306
2096	0	39,368,707	39,368,707	0	20,155	13,531,538	13,551,693

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

20. PLAN PROJECTION DISCLOSURES (CONTINUED)

Projection of OPEB Plan's Fiduciary Net Position using a June 30, 2017 Valuation Date								
Fiscal Year	I. Projected Beginning Fiduciary Net Position	II. Portion of Employer Contributions for Current Plan Members	III. Total Projected Benefit Payments	IV. Projected Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Projected Investment Earnings	VIII. Projected Ending Fiduciary Net Position for Current Plan Members
2018	146,837	380,287	380,287	0	150,000	150,000	15,549	312,386
2019	312,386	395,170	395,170	0	150,000	130,928	27,221	470,535
2020	470,535	400,155	400,155	0	150,000	121,310	38,370	630,215
2021	630,215	430,555	430,555	0	150,000	113,147	49,628	792,990
2022	792,990	482,599	482,599	0	150,000	101,133	61,103	955,226
2023	955,226	503,665	503,665	0	150,000	93,647	72,541	1,121,414
2024	1,121,414	543,286	543,286	0	150,000	86,553	84,257	1,292,224
2025	1,292,224	550,331	550,331	0	150,000	79,590	96,299	1,468,113
2026	1,468,113	557,381	557,381	0	150,000	71,631	108,699	1,648,443
2027	1,648,443	599,563	599,563	0	150,000	66,144	121,413	1,836,000
2028	1,836,000	625,662	625,662	0	150,000	60,161	134,635	2,030,796
2029	2,030,796	641,494	645,968	0	150,000	55,266	148,369	2,229,957
2030	2,229,957	689,614	702,767	0	150,000	50,585	162,409	2,429,798
2031	2,429,798	691,528	716,173	0	150,000	46,787	176,498	2,628,438
2032	2,628,438	690,551	730,110	0	150,000	43,126	190,502	2,822,507
2033	2,822,507	748,270	806,905	0	150,000	39,229	204,184	3,007,285
2034	3,007,285	768,410	839,654	0	150,000	36,084	217,211	3,189,336
2035	3,189,336	791,696	876,638	0	150,000	33,147	230,046	3,367,587
2036	3,367,587	808,897	911,820	0	150,000	30,057	242,612	3,537,333
2037	3,537,333	843,907	961,500	0	150,000	26,561	254,579	3,700,880
2038	3,700,880	894,531	1,025,574	0	150,000	23,648	266,109	3,859,594
2039	3,859,594	901,021	1,055,274	0	150,000	20,870	277,299	4,003,510
2040	4,003,510	907,918	1,094,664	0	150,000	18,381	287,445	4,122,590
2041	4,122,590	924,437	1,150,453	0	150,000	15,858	295,840	4,208,272
2042	4,208,272	931,566	1,204,541	0	150,000	14,001	301,881	4,251,179
2043	4,251,179	908,044	1,237,216	0	150,000	12,260	304,906	4,239,173
2044	4,239,173	901,143	1,272,837	0	150,000	10,482	304,059	4,182,020
2045	4,182,020	932,931	1,349,578	0	150,000	9,242	300,030	4,074,645
2046	4,074,645	909,863	1,382,053	0	150,000	7,969	292,460	3,902,884
2047	3,902,884	948,396	1,469,069	0	150,000	6,711	280,351	3,669,273
2048	3,669,273	979,257	1,547,808	0	150,000	5,520	263,881	3,370,123
2049	3,370,123	968,974	1,597,933	0	150,000	4,478	242,791	2,988,433
2050	2,988,433	926,835	1,622,821	0	150,000	3,750	215,882	2,512,079
2051	2,512,079	872,936	1,639,560	0	150,000	2,941	182,299	1,930,695
2052	1,930,695	846,114	1,688,916	0	150,000	2,521	141,311	1,231,725
2053	1,231,725	794,536	1,722,427	0	150,000	2,108	92,034	397,976
2054	397,976	771,654	1,782,153	0	150,000	1,741	33,255	34,996
2055	34,996	732,868	1,830,170	0	150,000	1,374	7,665	9,039
2056	9,039	725,651	1,918,569	0	150,000	1,035	5,835	6,870
2057	6,870	719,394	2,010,499	0	150,000	837	5,682	6,519

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

Projection of OPEB Plan's Fiduciary Net Position using a June 30, 2017 Valuation Date (Continued)

Fiscal Year	I. Projected Beginning Fiduciary Net Position	II. Portion of Employer Contributions for Current Plan Members	III. Total Projected Benefit Payments	IV. Projected Administrative Expense	V. Total Contributions to Trust	VI. Contributions to Trust for Current Plan Members	VII. Projected Investment Earnings	VIII. Projected Ending Fiduciary Net Position for Current Plan Members
2058	6,519	718,402	2,113,798	0	150,000	632	5,657	6,289
2059	6,289	714,428	2,222,783	0	150,000	469	5,641	6,110
2060	6,110	695,391	2,325,268	0	150,000	265	5,628	5,893
2061	5,893	680,111	2,439,655	0	150,000	131	5,613	5,744
2062	5,744	668,483	2,563,817	0	150,000	77	5,602	5,679
2063	5,679	648,936	2,688,804	0	150,000	58	5,598	5,656
2064	5,656	629,073	2,817,675	0	150,000	41	5,596	5,637
2065	5,637	613,319	2,957,241	0	150,000	15	5,595	5,610
2066	5,610	596,234	3,104,271	0	150,000	0	5,593	5,593
2067	5,593	577,756	3,255,965	0	150,000	0	5,592	5,592
2068	5,592	558,312	3,415,496	0	150,000	0	5,592	5,592
2069	5,592	537,768	3,583,523	0	150,000	0	5,592	5,592
2070	5,592	516,255	3,759,818	0	150,000	0	5,592	5,592
2071	5,592	493,725	3,945,181	0	150,000	0	5,592	5,592
2072	5,592	470,318	4,137,948	0	150,000	0	5,592	5,592
2073	5,592	446,125	4,340,334	0	150,000	0	5,592	5,592
2074	5,592	421,372	4,553,147	0	150,000	0	5,592	5,592
2075	5,592	396,092	4,774,865	0	150,000	0	5,592	5,592
2076	5,592	370,406	5,007,848	0	150,000	0	5,592	5,592
2077	5,592	344,612	5,252,714	0	150,000	0	5,592	5,592
2078	5,592	319,352	5,512,000	0	0	0	394	394
2079	394	295,538	5,785,997	0	0	0	28	28
2080	28	271,665	6,074,303	0	0	0	2	2
2081	2	247,450	6,378,481	0	0	0	0	0
2082	0	223,462	6,698,162	0	0	0	0	0
2083	0	199,735	7,034,830	0	0	0	0	0
2084	0	176,890	7,390,577	0	0	0	0	0
2085	0	155,118	7,765,089	0	0	0	0	0
2086	0	134,858	8,160,111	0	0	0	0	0
2087	0	116,297	8,577,927	0	0	0	0	0
2088	0	99,430	9,019,723	0	0	0	0	0
2089	0	84,539	9,486,163	0	0	0	0	0
2090	0	71,146	9,978,568	0	0	0	0	0
2091	0	59,479	10,498,858	0	0	0	0	0
2092	0	49,086	11,047,287	0	0	0	0	0
2093	0	40,097	11,625,440	0	0	0	0	0
2094	0	32,294	12,234,766	0	0	0	0	0
2095	0	25,700	12,876,306	0	0	0	0	0
2096	0	20,155	13,551,693	0	0	0	0	0

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

20. PLAN PROJECTION DISCLOSURES (CONTINUED)

Actuarial Present Values of Projected Benefit Payments using a June 30, 2017 Valuation Date
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Fiscal Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments	Present Value of Unfunded Benefit Payments	Present Value of Benefit Payments using Single Discount Rate
2018	146,837	380,287	146,837	233,450	146,837	233,450	380,287
2019	312,386	395,170	312,386	82,784	291,813	80,273	375,019
2020	470,535	400,155	400,155	0	349,184	0	360,385
2021	630,215	430,555	430,555	0	350,969	0	367,991
2022	792,990	482,599	482,599	0	367,485	0	391,439
2023	955,226	503,665	503,665	0	358,268	0	387,694
2024	1,121,414	543,286	543,286	0	361,001	0	396,867
2025	1,292,224	550,331	550,331	0	341,600	0	381,514
2026	1,468,113	557,381	557,381	0	323,191	0	366,698
2027	1,648,443	599,563	599,563	0	324,754	0	374,335
2028	1,836,000	625,662	625,662	0	316,572	0	370,710
2029	2,030,796	641,494	641,494	0	303,207	0	360,709
2030	2,229,957	689,614	689,614	0	304,485	0	367,993
2031	2,429,798	691,528	691,528	0	285,222	0	350,198
2032	2,628,438	690,551	690,551	0	266,062	0	331,870
2033	2,822,507	748,270	748,270	0	269,314	0	341,272
2034	3,007,285	768,410	768,410	0	258,349	0	332,587
2035	3,189,336	791,696	791,696	0	248,648	0	325,192
2036	3,367,587	808,897	808,897	0	237,319	0	315,315
2037	3,537,333	843,907	843,907	0	231,285	0	312,187
2038	3,700,880	894,531	894,531	0	229,014	0	314,040
2039	3,859,594	901,021	901,021	0	215,484	0	300,189
2040	4,003,510	907,918	907,918	0	202,834	0	287,062
2041	4,122,590	924,437	924,437	0	192,923	0	277,380
2042	4,208,272	931,566	931,566	0	181,607	0	265,266
2043	4,251,179	908,044	908,044	0	165,364	0	245,383
2044	4,239,173	901,143	901,143	0	153,299	0	231,100
2045	4,182,020	932,931	932,931	0	148,255	0	227,052
2046	4,074,645	909,863	909,863	0	135,067	0	210,146
2047	3,902,884	948,396	948,396	0	131,515	0	207,876
2048	3,669,273	979,257	979,257	0	126,852	0	203,696
2049	3,370,123	968,974	968,974	0	117,253	0	191,279
2050	2,988,433	926,835	926,835	0	104,768	0	173,631
2051	2,512,079	872,936	872,936	0	92,177	0	155,194
2052	1,930,695	846,114	846,114	0	83,461	0	142,755
2053	1,231,725	794,536	794,536	0	73,212	0	127,217
2054	397,976	771,654	397,976	373,678	34,256	123,296	117,253
2055	34,996	732,868	34,996	697,872	2,814	223,280	105,681
2056	9,039	725,651	9,039	716,612	679	222,322	99,304
2057	6,870	719,394	6,870	712,524	482	214,349	93,428

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

20. PLAN PROJECTION DISCLOSURES (CONTINUED)

Actuarial Present Values of Projected Benefit Payments using a June 30, 2017 Valuation Date (Continued)
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Fiscal Year	Projected Beginning Fiduciary Net Position	Projected Benefit Payments	Funded Portion of Benefit Payments	Unfunded Portion of Benefit Payments	Present Value of Funded Benefit Payments	Present Value of Unfunded Benefit Payments	Present Value of Benefit Payments using Single Discount Rate
2058	6,519	718,402	6,519	711,883	427	207,661	88,542
2059	6,289	714,428	6,289	708,139	385	200,303	83,562
2060	6,110	695,391	6,110	689,281	349	189,055	77,188
2061	5,893	680,111	5,893	674,218	315	179,315	71,642
2062	5,744	668,483	5,744	662,739	287	170,916	66,826
2063	5,679	648,936	5,679	643,257	265	160,860	61,564
2064	5,656	629,073	5,656	623,417	246	151,170	56,637
2065	5,637	613,319	5,637	607,682	229	142,885	52,403
2066	5,610	596,234	5,610	590,624	213	134,662	48,345
2067	5,593	577,756	5,593	572,163	199	126,496	44,458
2068	5,592	558,312	5,592	552,720	185	118,491	40,771
2069	5,592	537,768	5,592	532,176	173	110,627	37,268
2070	5,592	516,255	5,592	510,663	162	102,935	33,953
2071	5,592	493,725	5,592	488,133	151	95,409	30,815
2072	5,592	470,318	5,592	464,726	141	88,079	27,858
2073	5,592	446,125	5,592	440,533	132	80,962	25,077
2074	5,592	421,372	5,592	415,780	123	74,095	22,478
2075	5,592	396,092	5,592	390,500	115	67,479	20,052
2076	5,592	370,406	5,592	364,814	108	61,128	17,795
2077	5,592	344,612	5,592	339,020	100	55,083	15,712
2078	5,592	319,352	35,648	283,704	598	44,698	13,818
2079	394	295,538	125,362	170,176	1,965	25,998	12,135
2080	28	271,665	117,644	154,021	1,723	22,816	10,586
2081	2	247,450	106,958	140,492	1,463	20,181	9,151
2082	0	223,462	96,400	127,062	1,232	17,698	7,842
2083	0	199,735	86,001	113,734	1,027	15,361	6,652
2084	0	176,890	76,025	100,865	848	13,210	5,591
2085	0	155,118	66,590	88,528	694	11,243	4,653
2086	0	134,858	57,834	77,024	563	9,485	3,839
2087	0	116,297	49,832	66,465	453	7,936	3,142
2088	0	99,430	42,590	56,840	362	6,581	2,549
2089	0	84,539	36,216	48,323	287	5,425	2,057
2090	0	71,146	30,492	40,654	226	4,426	1,643
2091	0	59,479	25,509	33,970	177	3,586	1,303
2092	0	49,086	21,075	28,011	136	2,867	1,021
2093	0	40,097	17,236	22,861	104	2,269	791
2094	0	32,294	13,901	18,393	78	1,770	605
2095	0	25,700	11,079	14,621	58	1,365	457
2096	0	20,155	8,702	11,453	43	1,036	340

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

21. CHANGES TO NET OPEB EXPENSE

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of differences between expected & actual experience								
Fiscal Year	Differences between actual & expected experience	Recognition Period (years)	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	134,250	4.85	<u>27,680</u>	<u>27,680</u>	<u>27,680</u>	<u>27,680</u>	<u>23,530</u>	<u>0</u>
Net increase (decrease) in OPEB expense			27,680	27,680	27,680	27,680	23,530	0

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

21. CHANGES TO NET OPEB EXPENSE (CONTINUED)

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of the effects of Changes in Assumptions								
Fiscal Year	Differences from changes in Actuarial Assumptions	Recognition Period (years)	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	0	4.85	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Net increase (decrease) in OPEB expense			0	0	0	0	0	0

EXHIBIT A

Financial Statement Disclosure (As of the June 30, 2017 Measurement Date) (continued)

21. CHANGES TO NET OPEB EXPENSE (CONTINUED)

Deferred (Inflows)/Outflows in OPEB Expense arising from the recognition of differences between Projected & Actual Earnings on OPEB Plan Investments								
Fiscal Year	Differences between actual & expected experience	Recognition Period (years)	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018	(3,644)	5.00	(729)	(729)	(729)	(729)	(728)	0
Net increase (decrease) in OPEB expense			(729)	(729)	(729)	(729)	(728)	0

EXHIBIT AFinancial Statement Disclosure
(As of the June 30, 2017 Measurement Date)
(continued)**22. Impact of Patient Protection and Affordable Care Act ("PPACA") Excise Tax**

Under the Patient Protection and Affordable Care Act ("PPACA"), an excise tax will be imposed for tax years beginning after December 31, 2019 (formerly December 31, 2017, but amended by Consolidated Appropriations Act) for high cost employer sponsored health coverage. The law specifies a 40% excise tax, to be paid by the provider of such coverage, of the excess value beyond a basic dollar amount plus an additional "kicker" for qualified retirees or those engaged in a high risk profession. The projected 2020 threshold amounts are \$11,850 for single coverage and \$30,950 for family coverage and a "kicker" amount of \$1,650 for single coverage and \$3,450 for family coverage.

For the fiscal year ending June 30, 2018, the TOL for the excise tax is \$125,474 and the increase in OPEB Expense is \$12,519. Given your premiums through the 2018 fiscal year and the excise tax threshold, your average single premiums are \$4,962 below the excise tax threshold and your average family premiums are \$2,128 below the excise tax threshold. As more regulatory guidance becomes available, the calculation of the excise tax liability will evolve.

EXHIBIT B

Required Supplementary Information (As of the June 30, 2017 Measurement Date)

Notes to Required Supplementary Information:

Valuation Date:	Actuarially Determined Contribution was calculated as of June 30, 2017.
Actuarial Cost Method:	Individual Entry Age Normal
Asset-Valuation Method:	Market Value of Assets as of the Measurement Date, June 30, 2017.
<u>Actuarial Assumptions:</u>	
Investment Rate of Return:	7.05%, net of OPEB plan investment expense, including inflation.
Single Equivalent Discount Rate:	5.50%, net of OPEB plan investment expense, including inflation.
Inflation:	2.75% as of June 30, 2017 and for future periods
Salary Increases:	3.00% annually as of June 30, 2017 and for future periods
Cost of Living Adjustment:	Not Applicable
Pre-Retirement Mortality:	RP-2000 Employees Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Post-Retirement Mortality:	RP-2000 Healthy Annuitant Mortality Table projected generationally with scale BB and a base year 2009 for males and females
Disabled Mortality:	RP-2000 Healthy Annuitant Table projected generationally with Scale BB and a base year 2012 for males and females

EXHIBIT BRequired Supplementary Information
(As of the June 30, 2017 Measurement Date)
(continued)Notes to Required Supplementary Information (Continued):Plan Membership

Plan Membership: At June 30, 2017, OPEB plan membership consisted of the following

Inactive employees or beneficiaries currently receiving benefits:	63
Active Employees:	<u>62</u>
Total:	125

Changes in Assumptions: Effective June 30, 2017

- Discount rate is 5.50% previously 3.50%

EXHIBIT B

Required Supplementary Information (As of the June 30, 2017 Measurement Date) (continued)

Notes to Required Supplementary Information (Continued):

Deferred Outflows of Resources and Deferred Inflows of Resources Arising between Expected & Actual Experience					
Fiscal Year	Experience Losses	Experience Gains	Amounts recognized in OPEB Expense through June 30, 2018	Balances at June 30, 2018	
				Deferred Outflows of Resources	Deferred Inflows of Resources
2009				0	0
2010				0	0
2011				0	0
2012				0	0
2013				0	0
2014				0	0
2015				0	0
2016				0	0
2017				0	0
2018	134,250	0	27,680	106,570	0
Total				106,570	0

EXHIBIT B

Required Supplementary Information (As of the June 30, 2017 Measurement Date) (continued)

Notes to Required Supplementary Information (Continued):

Deferred Outflows of Resources and Deferred Inflows of Resources Arising from Changes of Assumptions					
Fiscal Year	Increase in the Total OPEB Liability	Decrease in the Total OPEB Liability	Amounts recognized in OPEB Expense through June 30, 2018	Balances at June 30, 2018	
				Deferred Outflows of Resources	Deferred Inflows of Resources
2009				0	0
2010				0	0
2011				0	0
2012				0	0
2013				0	0
2014				0	0
2015				0	0
2016				0	0
2017				0	0
2018	0	0	0	0	0
Total				0	0

EXHIBIT B

Required Supplementary Information (As of the June 30, 2017 Measurement Date) (continued)

Notes to Required Supplementary Information (Continued):

Deferred Outflows of Resources and Deferred Inflows of Resources between Projected & Actual Earnings on OPEB Plan Investments					
Fiscal Year	Increase in the Total OPEB Liability	Decrease in the Total OPEB Liability	Amounts recognized in OPEB Expense through June 30, 2018	Balances at June 30, 2018	
				Deferred Outflows of Resources	Deferred Inflows of Resources
2009				0	0
2010				0	0
2011				0	0
2012				0	0
2013				0	0
2014				0	0
2015				0	0
2016				0	0
2017				0	0
2018	0	(3,644)	(729)	0	(2,915)
Total				0	(2,915)

EXHIBIT B

Required Supplementary Information (As of the June 30, 2017 Measurement Date) (continued)

Notes to Required Supplementary Information (Continued):

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources related to OPEB as of June 30, 2018

	Deferred Outflows of Resources	Deferred Inflows of Resources
I. Differences between actual & expected experience	106,570	0
II. Changes of assumptions	0	0
III. Net difference between projected & actual earnings on OPEB plan investments	<u>0</u>	<u>(2,915)</u>
IV. Total [I.+II.+III.]	106,570	(2,915)
Year ended June 30:		
2019	26,951	
2020	26,951	
2021	26,951	
2022	22,802	
2023	0	
Thereafter	0	

EXHIBIT BRequired Supplementary Information
(As of the June 30, 2017 Measurement Date)
(continued)Notes to Required Supplementary Information (Continued):Contributions:

The contribution requirements of plan members and the Town are established and may be amended through Town ordinances. The Town expects to contribute \$150,000 beyond the pay-as-you-go cost for the 2018 fiscal year. Total Town premiums plus implicit costs for the retiree medical program are \$380,287 for the 2018 fiscal year.

EXHIBIT C

Reconciliation of Plan Participation (As of the June 30, 2017 Valuation Date)

ACTIVE EMPLOYEES

	<u>June 30, 2017</u>	<u>June 30, 2015</u>
A. Average Age at Hire	37.02	36.72
B. Average Service	<u>11.59</u>	<u>11.98</u>
C. Average Current Age	48.61	48.70

RETIRED EMPLOYEES & DEPENDENTS

	<u>June 30, 2017</u>	<u>June 30, 2015</u>
I. Retirees		
A. Under Age 65	9	9
B. Age 65 & Over	<u>31</u>	<u>32</u>
C. Total Retirees	40	41
II. Dependents of Retirees		
A. Under Age 65	6	6
B. Age 65 & Over	<u>17</u>	<u>2</u>
C. Total Retirees	23	8
III. Retirees & Dependents		
A. Under Age 65	15	15
B. Age 65 & Over	<u>48</u>	<u>34</u>
C. Total Retirees	63	49

EXHIBIT D

Projected Cash Flows (Open Group) – Partial Funding Approach

Total Medical, Dental & Life Insurance - Partial Funding - 5.50% discount rate								
Measurement Date	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 7.05% return	III. Net OPEB Liability (Asset) [I. - II.]	IV. Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Excess Employer Payments (beyond claims)	VIII. Total Employer Payments [VI. + VII.]
June 30, 2017	9,429,428	146,837	9,282,591	1.56%	279,591	380,287	150,000	530,287
June 30, 2018	9,852,411	312,386	9,540,025	3.17%	301,302	395,170	150,000	545,170
June 30, 2019	10,269,834	489,607	9,780,227	4.77%	326,412	400,155	150,000	550,155
June 30, 2020	10,748,521	679,322	10,069,199	6.32%	339,875	430,555	150,000	580,555
June 30, 2021	11,236,012	882,412	10,353,600	7.85%	348,642	482,599	150,000	632,599
June 30, 2022	11,706,237	1,099,820	10,606,417	9.40%	370,660	503,665	150,000	653,665
June 30, 2023	12,203,465	1,332,555	10,870,910	10.92%	384,085	543,286	150,000	693,286
June 30, 2024	12,701,291	1,581,698	11,119,593	12.45%	398,809	550,331	150,000	700,331
June 30, 2025	13,233,283	1,848,405	11,384,878	13.97%	413,237	557,381	150,000	707,381
June 30, 2026	13,800,380	2,133,915	11,666,465	15.46%	435,960	599,563	150,000	749,563
June 30, 2027	14,351,808	2,439,553	11,912,255	17.00%	450,859	625,662	150,000	775,662
June 30, 2028	14,949,413	2,766,739	12,182,674	18.51%	471,085	645,968	150,000	795,968
June 30, 2029	15,579,162	3,116,992	12,462,170	20.01%	489,584	702,767	150,000	852,767
June 30, 2030	16,204,791	3,491,937	12,712,854	21.55%	512,466	716,173	150,000	866,173
June 30, 2031	16,856,550	3,893,316	12,963,234	23.10%	536,638	730,110	150,000	880,110
June 30, 2032	17,553,505	4,322,992	13,230,513	24.63%	558,289	806,905	150,000	956,905
June 30, 2033	18,226,981	4,782,960	13,444,021	26.24%	586,401	839,654	150,000	989,654
June 30, 2034	18,956,732	5,275,356	13,681,376	27.83%	613,669	876,638	150,000	1,026,638
June 30, 2035	19,688,095	5,802,466	13,885,629	29.47%	641,673	911,820	150,000	1,061,820
June 30, 2036	20,480,662	6,366,737	14,113,925	31.09%	671,194	961,500	150,000	1,111,500
June 30, 2037	21,296,408	6,970,789	14,325,619	32.73%	705,745	1,025,574	150,000	1,175,574
June 30, 2038	22,094,817	7,617,427	14,477,390	34.48%	737,877	1,055,274	150,000	1,205,274
June 30, 2039	22,940,399	8,309,653	14,630,746	36.22%	773,234	1,094,664	150,000	1,244,664
June 30, 2040	23,807,786	9,050,681	14,757,105	38.02%	809,621	1,150,453	150,000	1,300,453
June 30, 2041	24,756,144	9,843,951	14,912,193	39.76%	851,442	1,204,541	150,000	1,354,541
June 30, 2042	25,744,678	10,693,147	15,051,531	41.54%	893,533	1,237,216	150,000	1,387,216
June 30, 2043	26,773,698	11,602,211	15,171,487	43.33%	939,291	1,272,837	150,000	1,422,837
June 30, 2044	27,831,439	12,575,364	15,256,075	45.18%	987,436	1,349,578	150,000	1,499,578
June 30, 2045	28,980,599	13,617,125	15,363,474	46.99%	1,037,905	1,382,053	150,000	1,532,053
June 30, 2046	30,197,488	14,732,330	15,465,158	48.79%	1,091,997	1,469,069	150,000	1,619,069
June 30, 2047	31,464,930	15,926,157	15,538,773	50.62%	1,147,591	1,547,808	150,000	1,697,808
June 30, 2048	32,776,816	17,204,149	15,572,667	52.49%	1,205,616	1,597,933	150,000	1,747,933

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Total Medical, Dental & Life Insurance - 7.00% discount rate increasing at 0.00% per year

Measurement Date	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 7.05% return	III. Net OPEB Liability (Asset) ("NOL") [I. - II.]	IV Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Annual Funding / (Payments)	VIII. Total Employer Payments [VI. + VII.]
June 30, 2017	7,786,850	146,837	7,640,013	1.89%	196,061	380,287	262,600	642,887
June 30, 2018	8,134,804	428,888	7,705,916	5.27%	211,802	395,170	262,600	657,770
June 30, 2019	8,508,038	730,824	7,777,214	8.59%	230,037	400,155	262,600	662,755
June 30, 2020	8,921,574	1,054,046	7,867,528	11.81%	239,857	430,555	262,600	693,155
June 30, 2021	9,342,039	1,400,055	7,941,984	14.99%	245,545	482,599	262,600	745,199
June 30, 2022	9,742,331	1,770,458	7,971,873	18.17%	261,040	503,665	262,600	766,265
June 30, 2023	10,164,687	2,166,974	7,997,713	21.32%	270,271	543,286	262,600	805,886
June 30, 2024	10,584,090	2,591,445	7,992,645	24.48%	280,449	550,331	262,600	812,931
June 30, 2025	11,036,203	3,045,841	7,990,362	27.60%	290,464	557,381	262,600	819,981
June 30, 2026	11,522,893	3,532,272	7,990,621	30.65%	306,602	599,563	262,600	862,163
June 30, 2027	11,992,728	4,052,996	7,939,732	33.80%	316,805	625,662	262,600	888,262
June 30, 2028	12,501,743	4,610,431	7,891,312	36.88%	331,000	645,968	262,600	908,568
June 30, 2029	13,039,849	5,207,165	7,832,684	39.93%	343,954	702,767	262,600	965,367
June 30, 2030	13,568,708	5,845,969	7,722,739	43.08%	360,134	716,173	262,600	978,773
June 30, 2031	14,122,603	6,529,809	7,592,794	46.24%	377,317	730,110	262,600	992,710
June 30, 2032	14,718,764	7,261,860	7,456,904	49.34%	392,557	806,905	262,600	1,069,505
June 30, 2033	15,287,012	8,045,520	7,241,492	52.63%	412,592	839,654	262,600	1,102,254
June 30, 2034	15,900,146	8,884,428	7,015,718	55.88%	431,963	876,638	262,600	1,139,238
June 30, 2035	16,516,457	9,782,479	6,733,978	59.23%	451,824	911,820	262,600	1,174,420
June 30, 2036	17,180,413	10,743,843	6,436,570	62.54%	472,742	961,500	262,600	1,224,100
June 30, 2037	17,860,072	11,772,983	6,087,089	65.92%	497,228	1,025,574	262,600	1,288,174
June 30, 2038	18,521,306	12,874,677	5,646,629	69.51%	519,855	1,055,274	262,600	1,317,874
June 30, 2039	19,222,415	14,054,041	5,168,374	73.11%	544,764	1,094,664	262,600	1,357,264
June 30, 2040	19,939,260	15,316,550	4,622,710	76.82%	570,325	1,150,453	262,600	1,413,053
June 30, 2041	20,714,272	16,668,066	4,046,206	80.47%	599,693	1,204,541	262,600	1,467,141
June 30, 2042	21,517,083	18,114,864	3,402,219	84.19%	629,213	1,237,216	262,600	1,499,816
June 30, 2043	22,358,190	19,663,661	2,694,529	87.95%	661,374	1,272,837	262,600	1,535,437
June 30, 2044	23,225,493	21,321,648	1,903,845	91.80%	695,147	1,349,578	262,600	1,612,178
June 30, 2045	24,151,037	23,096,523	1,054,514	95.63%	730,574	1,382,053	262,600	1,644,653
June 30, 2046	25,139,075	24,996,527	142,548	99.43%	768,598	1,469,069	262,600	1,731,669
June 30, 2047	26,158,245	27,030,481	(872,236)	103.33%	807,645	1,547,808	142,548	1,690,356
June 30, 2048	27,197,347	29,083,617	(1,886,270)	106.94%	848,324	1,597,933	0	1,597,933

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Total Medical, Dental & Life Insurance - 7.00% discount rate and increasing at 3.00% per year

Measurement Date	I. Total OPEB Liability ("TOL") as of Measurement Date	II. Fiduciary Net Position as of Measurement Date with expected 7.05% return	III. Net OPEB Liability (Asset) ("NOL") [I. - II.]	IV. Funded Ratio [II. / I.]	V. Service Cost	VI. Employer Share of Premiums / Claims	VII. Annual Funding / (Payments)	VIII. Total Employer Payments [VI. + VII.]
June 30, 2017	7,786,850	146,837	7,640,013	1.89%	196,061	380,287	197,800	578,087
June 30, 2018	8,134,804	361,843	7,772,961	4.45%	211,802	395,170	203,734	598,904
June 30, 2019	8,508,038	598,146	7,909,892	7.03%	230,037	400,155	209,846	610,001
June 30, 2020	8,921,574	857,432	8,064,142	9.61%	239,857	430,555	216,141	646,696
June 30, 2021	9,342,039	1,141,511	8,200,528	12.22%	245,545	482,599	222,625	705,224
June 30, 2022	9,742,331	1,452,326	8,290,005	14.91%	261,040	503,665	229,304	732,969
June 30, 2023	10,164,687	1,791,964	8,372,723	17.63%	270,271	543,286	236,183	779,469
June 30, 2024	10,584,090	2,162,664	8,421,426	20.43%	280,449	550,331	243,268	793,599
June 30, 2025	11,036,203	2,566,829	8,469,374	23.26%	290,464	557,381	250,566	807,947
June 30, 2026	11,522,893	3,007,038	8,515,855	26.10%	306,602	599,563	258,083	857,646
June 30, 2027	11,992,728	3,486,060	8,506,668	29.07%	316,805	625,662	265,825	891,487
June 30, 2028	12,501,743	4,006,863	8,494,880	32.05%	331,000	645,968	273,800	919,768
June 30, 2029	13,039,849	4,572,634	8,467,215	35.07%	343,954	702,767	282,014	984,781
June 30, 2030	13,568,708	5,186,790	8,381,918	38.23%	360,134	716,173	290,474	1,006,647
June 30, 2031	14,122,603	5,852,998	8,269,605	41.44%	377,317	730,110	299,188	1,029,298
June 30, 2032	14,718,764	6,575,189	8,143,575	44.67%	392,557	806,905	308,164	1,115,069
June 30, 2033	15,287,012	7,357,582	7,929,430	48.13%	412,592	839,654	317,409	1,157,063
June 30, 2034	15,900,146	8,204,699	7,695,447	51.60%	431,963	876,638	326,931	1,203,569
June 30, 2035	16,516,457	9,121,389	7,395,068	55.23%	451,824	911,820	336,739	1,248,559
June 30, 2036	17,180,413	10,112,854	7,067,559	58.86%	472,742	961,500	346,841	1,308,341
June 30, 2037	17,860,072	11,184,669	6,675,403	62.62%	497,228	1,025,574	357,246	1,382,820
June 30, 2038	18,521,306	12,342,813	6,178,493	66.64%	519,855	1,055,274	367,963	1,423,237
June 30, 2039	19,222,415	13,593,694	5,628,721	70.72%	544,764	1,094,664	379,002	1,473,666
June 30, 2040	19,939,260	14,944,184	4,995,076	74.95%	570,325	1,150,453	390,372	1,540,825
June 30, 2041	20,714,272	16,401,647	4,312,625	79.18%	599,693	1,204,541	402,083	1,606,624
June 30, 2042	21,517,083	17,973,978	3,543,105	83.53%	629,213	1,237,216	414,145	1,651,361
June 30, 2043	22,358,190	19,669,638	2,688,552	87.98%	661,374	1,272,837	426,569	1,699,406
June 30, 2044	23,225,493	21,497,697	1,727,796	92.56%	695,147	1,349,578	439,366	1,788,944
June 30, 2045	24,151,037	23,467,875	683,162	97.17%	730,574	1,382,053	452,547	1,834,600
June 30, 2046	25,139,075	25,590,588	(451,513)	101.80%	768,598	1,469,069	466,123	1,935,192
June 30, 2047	26,158,245	27,876,998	(1,718,753)	106.57%	807,645	1,547,808	0	1,547,808
June 30, 2048	27,197,347	29,842,326	(2,644,979)	109.73%	848,324	1,597,933	0	1,597,933

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Town of Sterling

GASB 45 Projection of Funding Annual Service Cost and Impact on Unfunded Obligation

Total Medical, Dental & Life Insurance - Funding Annual Service Cost - 5.50% discount rate

Measurement Date	I. Total OPEB Liability	II. Service Cost	III. Employer Share of Premiums / Claims including "implicit cost"	IV. Funding Service Cost beyond claims	V. Total Funding Costs [III. + IV.]	VI. Present Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"	VII. Present Value at 3.00% of Funding Service Cost beyond claims	VIII. Present Value at 3.00% of Total Funding Costs [VI. + VII.]	IX. Fiduciary Net Position at Beginning of year	X. Net OPEB Liability (Asset) [I. - IX.]	XI. Present Value at 3.00% of Net OPEB Liability (Asset)
June 30, 2017	9,429,428	279,591	380,287	(100,696)	279,591	380,287	(100,696)	279,591	146,837	9,282,591	9,282,591
June 30, 2018	9,852,411	301,302	395,170	(93,868)	301,302	383,660	(91,134)	292,526	54,217	9,798,194	9,512,810
June 30, 2019	10,269,834	326,412	400,155	(73,743)	326,412	377,184	(69,510)	307,674	0	10,269,834	9,680,304
June 30, 2020	10,748,521	339,875	430,555	(90,680)	339,875	394,019	(82,985)	311,034	0	10,748,521	9,836,419
June 30, 2021	11,236,012	348,642	482,599	(133,957)	348,642	428,783	(119,019)	309,764	0	11,236,012	9,983,051
June 30, 2022	11,706,237	370,660	503,665	(133,005)	370,660	434,466	(114,731)	319,735	0	11,706,237	10,097,903
June 30, 2023	12,203,465	384,085	543,286	(159,201)	384,085	454,993	(133,328)	321,665	0	12,203,465	10,220,210
June 30, 2024	12,701,291	398,809	550,331	(151,522)	398,809	447,469	(123,201)	324,268	0	12,701,291	10,327,312
June 30, 2025	13,233,283	413,237	557,381	(144,144)	413,237	440,002	(113,789)	326,213	0	13,233,283	10,446,476
June 30, 2026	13,800,380	435,960	599,563	(163,603)	435,960	459,515	(125,388)	334,127	0	13,800,380	10,576,842
June 30, 2027	14,351,808	450,859	625,662	(174,803)	450,859	465,551	(130,070)	335,481	0	14,351,808	10,679,093
June 30, 2028	14,949,413	471,085	645,968	(174,883)	471,085	466,661	(126,339)	340,322	0	14,949,413	10,799,774
June 30, 2029	15,579,162	489,584	702,767	(213,183)	489,584	492,907	(149,522)	343,385	0	15,579,162	10,926,911
June 30, 2030	16,204,791	512,466	716,173	(203,707)	512,466	487,679	(138,715)	348,964	0	16,204,791	11,034,674
June 30, 2031	16,856,550	536,638	730,110	(193,472)	536,638	482,689	(127,908)	354,781	0	16,856,550	11,144,165
June 30, 2032	17,553,505	558,289	806,905	(248,616)	558,289	517,922	(159,577)	358,345	0	17,553,505	11,266,927
June 30, 2033	18,226,981	586,401	839,654	(253,253)	586,401	523,245	(157,819)	365,426	0	18,226,981	11,358,452
June 30, 2034	18,956,732	613,669	876,638	(262,969)	613,669	530,380	(159,101)	371,279	0	18,956,732	11,469,135
June 30, 2035	19,688,095	641,673	911,820	(270,147)	641,673	535,598	(158,683)	376,915	0	19,688,095	11,564,681
June 30, 2036	20,480,662	671,194	961,500	(290,306)	671,194	548,330	(165,557)	382,773	0	20,480,662	11,679,835
June 30, 2037	21,296,408	705,745	1,025,574	(319,829)	705,745	567,835	(177,082)	390,753	0	21,296,408	11,791,305
June 30, 2038	22,094,817	737,877	1,055,274	(317,397)	737,877	567,262	(170,617)	396,645	0	22,094,817	11,877,053
June 30, 2039	22,940,399	773,234	1,094,664	(321,430)	773,234	571,297	(167,752)	403,545	0	22,940,399	11,972,422
June 30, 2040	23,807,786	809,621	1,150,453	(340,832)	809,621	582,925	(172,697)	410,228	0	23,807,786	12,063,209
June 30, 2041	24,756,144	851,442	1,204,541	(353,099)	851,442	592,554	(173,701)	418,853	0	24,756,144	12,178,382
June 30, 2042	25,744,678	893,533	1,237,216	(343,683)	893,533	590,901	(164,145)	426,756	0	25,744,678	12,295,802
June 30, 2043	26,773,698	939,291	1,272,837	(333,546)	939,291	590,208	(154,664)	435,544	0	26,773,698	12,414,823
June 30, 2044	27,831,439	987,436	1,349,578	(362,142)	987,436	607,565	(163,032)	444,533	0	27,831,439	12,529,409
June 30, 2045	28,980,599	1,037,905	1,382,053	(344,148)	1,037,905	604,063	(150,419)	453,644	0	28,980,599	12,666,746
June 30, 2046	30,197,488	1,091,997	1,469,069	(377,072)	1,091,997	623,394	(160,009)	463,385	0	30,197,488	12,814,194
June 30, 2047	31,464,930	1,147,591	1,547,808	(400,217)	1,147,591	637,676	(164,884)	472,792	0	31,464,930	12,963,135

EXHIBIT E

Projected Cash Flows (Open Group) – Funded Approach

Total Medical & Life Insurance - Partial Funding

Measurement Date	Number of Retirees, Spouses & Surviving Spouses	Total OPEB Liability	Present Value at 3.00% of Total OPEB Liability	Employer Share of Premiums / Claims including "implicit cost"	Present Value at 3.00% of Employer Share of Premiums / Claims including "implicit cost"
June 30, 2017	63	9,429,428	9,429,428	380,287	380,287
June 30, 2018	65	9,852,411	9,565,448	395,170	383,660
June 30, 2019	68	10,269,834	9,680,304	400,155	377,184
June 30, 2020	68	10,748,521	9,836,419	430,555	394,019
June 30, 2021	68	11,236,012	9,983,051	482,599	428,783
June 30, 2022	71	11,706,237	10,097,903	503,665	434,466
June 30, 2023	72	12,203,465	10,220,210	543,286	454,993
June 30, 2024	72	12,701,291	10,327,312	550,331	447,469
June 30, 2025	73	13,233,283	10,446,476	557,381	440,002
June 30, 2026	73	13,800,380	10,576,842	599,563	459,515
June 30, 2027	73	14,351,808	10,679,093	625,662	465,551
June 30, 2028	73	14,949,413	10,799,774	645,968	466,661
June 30, 2029	73	15,579,162	10,926,911	702,767	492,907
June 30, 2030	74	16,204,791	11,034,674	716,173	487,679
June 30, 2031	74	16,856,550	11,144,165	730,110	482,689
June 30, 2032	74	17,553,505	11,266,927	806,905	517,922
June 30, 2033	74	18,226,981	11,358,452	839,654	523,245
June 30, 2034	74	18,956,732	11,469,135	876,638	530,380
June 30, 2035	74	19,688,095	11,564,681	911,820	535,598
June 30, 2036	74	20,480,662	11,679,835	961,500	548,330
June 30, 2037	74	21,296,408	11,791,305	1,025,574	567,835
June 30, 2038	74	22,094,817	11,877,053	1,055,274	567,262
June 30, 2039	74	22,940,399	11,972,422	1,094,664	571,297
June 30, 2040	74	23,807,786	12,063,209	1,150,453	582,925
June 30, 2041	74	24,756,144	12,178,382	1,204,541	592,554
June 30, 2042	74	25,744,678	12,295,802	1,237,216	590,901
June 30, 2043	74	26,773,698	12,414,823	1,272,837	590,208
June 30, 2044	74	27,831,439	12,529,409	1,349,578	607,565
June 30, 2045	74	28,980,599	12,666,746	1,382,053	604,063
June 30, 2046	74	30,197,488	12,814,194	1,469,069	623,394
June 30, 2047	74	31,464,930	12,963,135	1,547,808	637,676
June 30, 2048	74	32,776,816	13,110,305	1,597,933	639,153
June 30, 2049	74	34,168,813	13,269,016	1,622,821	630,201
June 30, 2050	74	35,676,171	13,450,853	1,639,560	618,157
June 30, 2051	74	37,314,043	13,658,615	1,688,916	618,219
June 30, 2052	74	39,062,923	13,882,314	1,722,427	612,122
June 30, 2053	74	40,946,387	14,127,831	1,782,153	614,901
June 30, 2054	74	43,089,478	14,434,240	1,830,170	613,076
June 30, 2055	74	45,435,242	14,776,729	1,918,569	623,969
June 30, 2056	74	47,861,930	15,112,574	2,010,499	634,822

EXHIBIT F**GLOSSARY**

Accrual Accounting - A system of accounting in which revenues are recorded when earned and outlays are recorded when goods are received or services performed, even though the actual receipt of revenues and payment for goods or services may occur, in whole or in part, at a different time.

Actuarially Determined Contribution - Amount of funding required annually to fully fund plan benefits. Determined by the actuary using a consistent methodology.

Amortization - Allows the recognition of liability over a fixed period of time.

Cash Basis Accounting - A system of accounting in which revenues are recorded when received and outlays are recorded when payment is made.

Deferred Inflows/Outflows of Resources - Amounts arising from experience gains and losses that have not been recognized into the OPEB Expense, but will be recognized in the future.

Discount Rate - The interest rate used to calculate the present value of future cash flows. Under GASB 75, the rate should be the expected long term rate of return on investments for a plan that is being fully funded, the 20 year municipal bond index for a pay-as-you-go plan, and a blend of the two rates for a plan that is being partially funded.

Fiduciary Net Position - The value of cash, investments, other assets and property belonging to an OPEB trust.

GASB - Government Accounting Standards Board. "The Governmental Accounting Standards Board (GASB) was organized in 1984 by the Financial Accounting Foundation (FAF) to establish standards of financial accounting and reporting for state and local governmental entities. Its standards guide the preparation of external financial reports of those entities."

Implicit Subsidy - The liability that arises because retirees who are not eligible for Medicare are charged the same premium as active employees even though their actual medical costs are higher on average.

Irrevocable Contribution - The transfer of assets to a qualified trust in which assets may only be withdrawn for the purpose of providing retiree other post employment benefits.

EXHIBIT F**GLOSSARY***(continued)*

Net OPEB Liability (NOL) - Total OPEB Liability less the Fiduciary Net Position.

Other Post Employment Benefits (OPEB) - Benefits that an employee will begin to receive at the start of retirement. This does not include pension benefits paid to the retired employee.

OPEB Trust - An entity which holds assets for the sole purpose of funding OPEB. All contributions and earning within this entity must be irrevocable and protected from creditors.

Pay-as-you-go funding - Paying benefits (such as pensions or OPEB) on a cash basis, with no money set aside for future liabilities which are already incurred.

Service Cost - The actuarially determined present value contribution needed to fund benefits which are earned for employee service rendered during the current year. Service cost depends on many factors, including the interest rate used to discount future cashflows, and expected inflation.

Total OPEB Liability (TOL) - That portion, as determined by the Individual Entry Age Normal Actuarial Cost Method, of the Actuarial Present Value of benefits and expenses which are not provided for by future Service Costs.